Notebook, N-09-05-20

May 20, 1909

ENDURANCE BOOK —

Originated on the above date as a book in which to record readings of all "D4" cells connected in the Endurance Section for durability test in series.

The previous readings of each cell or group will be found in its individual record book.

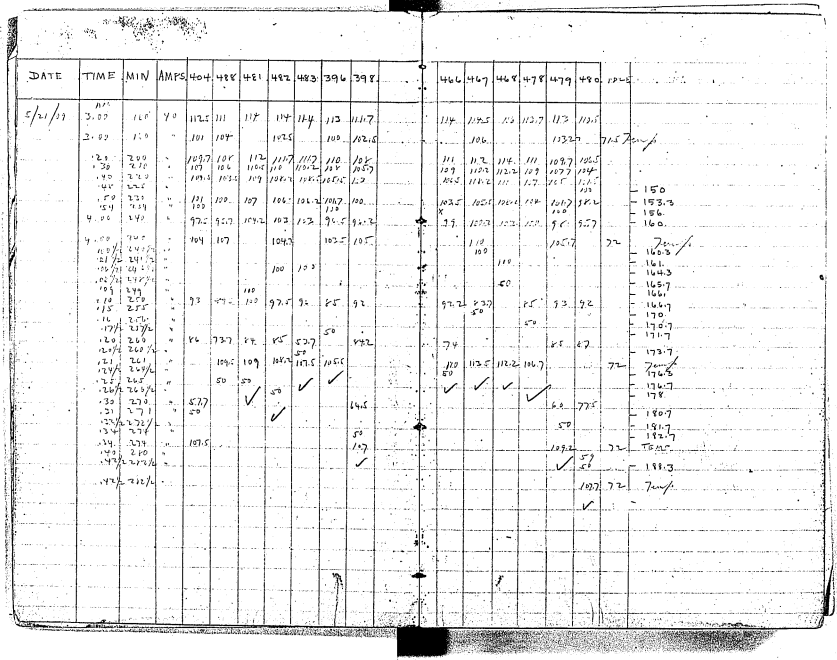
Cells in this section get two runs per day on a regular schedule, as follows:

4.55 A.M. and P.M. — On charge for 7 hours at 30 amperes.

12.00 NOON and NIGHT — On discharge at 40 amperes, — each cell to be short-circuited when it reaches .50 volt.

Hourly temperature readings will be taken in one cell of each group.

DATE	TIME	MIN	Alt	484	488	481	482	483	396	398		466	467	468	478	479	480	TEMP	
	Change		122	75			(93)		(157)	198		(104)		106		(106)				
5/20/09	4:55	0	30	110	111		70		120.7	112			119			114.2		73.2	emily
	5:55	60	"	109	107.5		76		110.7	111.5			113			108.7		72.5	"
	6:55	120	"	101.5	102.2		81		103.	105.5			107.			103.		72.5	"
	7:55	180	"	99.5	100.		84		100.5	103.2			103.2			101.2		72.5	"
	8:55	240	"	96.5	97.5		86.7		96.5	100			100.7			98.7		73	"
	9:55	300	"	95.2	96.2		88.2		95.	98.7			100.			97.5		73	"
	10:55	360	"	95	96		91		95.2	98			100			97.5		72.5	"
	11:55	420	"	94.7	96.5		91.7		95.7	97.5			100.2			97.7		72.5	"
	11:55	420	"	100.2	102	102.5	102.5	102.5	101	102.5		102.5	102	102	102	102	102		
5/21	12:00	0	30	144	142.7		142.5	141.7	141.7	142	142		140.2	140	139	138.2	138		
	:05	5	"	133	133		133	132.2	132	135			132.7	132	133	133	133		
	:10	10	"	131	131		130.5	130.2	130	132.2	132		131.5	131	131	131	131		
	:15	15	"	128.2	128.2		128	127.7	127.7	127.7	127.5		129	129	129	128.5	128.2	128.2	
	:20	20	"	125	125		125	124.7	124.5	125.2	125		125	125	124	125	125	123.5	
	:25	25	"	123.2	123.2		123.2	123	123	123	123		123	123	122	123	123	122	
	1:00	60	"	98	99.5		96.7		97.5	100			102.7			100.2		71.7	Temp
	:05	65	"	120	120		121	121	121	120.2			121.5	121	122	121	121	120	
	:40	100	"	119	118		120	120	119	119.2			120	120	121	119	119	119.2	
	2:00	120	"	117.7	117	118.5	119	119	118	118.5			118.5	119	120.5	118.5	118	117	
	2:00	120	"	98.2	100		99		97.5	100.2			104.5			101.2		71.5	Temp
	:20	140	"	116.2	115.5	117.5	117	117	116	117			117.5	118	119	117	117	116.2	
	:40	160	"	115	113.7	115.7	114	116	115	114			114	116	117.7	115	115	113	



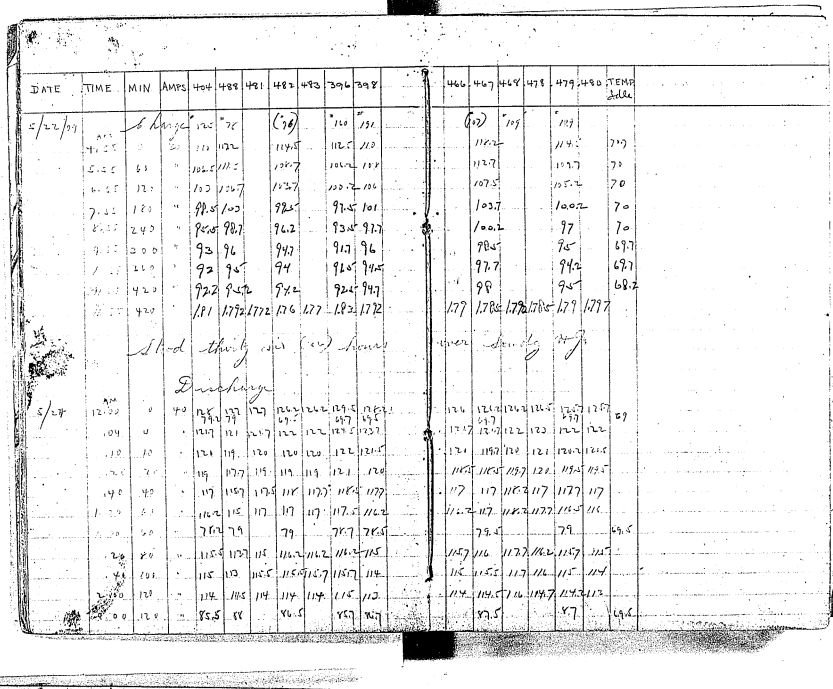
DATE	TIME	MIN	AMPS	404	488	481	482	483	396	398	466	467	468	478	479	480	1245	
5/21/19	3.00	180	40	112.5	111	118	114	114	113	111.7	114	113.5	113	112.7	113	113.5		
	2.00	120	"	101	104		102.5		100	102.5		106			113.7		71.5	Temp
	1.30	90	"	109.7	104	112	111.7	111.7	110	104	111	111.7	111.6	111	109.7	110.5		
	1.00	60	"	103	104	110	110.2	111	108.7	103.7	109	112.2	112.2	109	107.7	109		
	.45	45	"	101.5	102.5	107	109.2	111.5	108.2	103	112.5	111.2	111	112	112	111.5		
	.30	30	"													103		150
	.15	15	"	111	100	107	106	106.2	106.7	100	103.5	105.5	106.6	106	106.7	106.2		153.3
	12:45	0:00	"	102				108	104		98				106			156
	4.00	240	"	97.2	95.7	104.2	103	103	94.5	92.5	93	107.3	103	102	96	95.7		160
	3.45	225	"															
	3.30	210	"	104	107		104.7		103.5	105		110			110.7		72	Temp
	3.15	195	"									109						160.3
	3.00	180	"				100	103					110					161
	2.45	165	"															164.3
	2.30	150	"										50					165.7
	2.15	135	"			110												166
	2.00	120	"	93	99	110	97.5	92	85	92		97.2	93.7	85	93	92		166.7
	1.45	105	"									97.2						170
	1.30	90	"									50			50			170.7
	1.15	75	"						50									171.7
	1.00	60	"	96	103	114	85	93.7		88.2	74				85	87		
	12:45	45	"					50										173.7
	12:30	30	"		104.2	109	104.2	107.5	105.5		110	113.5	112.2	106.7			72	Temp
	12:15	15	"								50							176.5
	12:00	0	"		50	50												176.7
	11:45	345	"															178
	11:30	330	"	52.7						84.5					82	77.5		
	11:15	315	"	50														180.7
	11:00	300	"												50			181.7
	10:45	285	"						50									182.7
	10:30	270	"	107.5					107						109.2		72	TEMP
	10:15	255	"													50		
	10:00	240	"															188.3
	9:45	225	"												109.2	77		Temp

DATE	TIME	MIN	AMPS	404	408	481	487	483	396	398	466	467	468	479	479	480	1065	
5/21	change			123	76		(54)		158	159	(105	107		(107				
	6:55	0	30	110.5	114.7		114		112.5	110.7	114			112.5		72	Temp	
	7:55	60		111.5	110.7		116		105.5	104.7	111.2			111		71.7		
	8:55	120		102.7	101.7		103		101.7	101.5	101			104.5		71		
	9:55	180		99	102		99.7		97	101.5	103			103.7		70.7		
	10:55	240		96	99.5		97		95.5	98.2	101			98.2		70.5		
	11:55	300		94	97.7		95.2		93.5	96.5	99.2			96.7		70.7		
	12:55	360		93.2	96.5		94.7		93	96.5	98.5			96		70.7		
	1:55	420		94	96.7		95		94	96	98.7			96		71		
	2:55	480		183	179	178.2	176.5	178	167	162.7	162.7	159.5	159.2	158.2	157.9	157.2		F.P
5/21	12.00	0	40	142	141.2	140.2	138.7	139.5	143.2	141.7	138.7	138.7	138.7	138.5	138.2	138		
	.04	4	"	134	133.7	133.	132.7	132.1	136	135.5	134	134.2	134	133.7	133.7	133.5		
	.10	10	"	131.7	131.5	130.7	130.5	130.2	132.5	132.2	131.7	131.7	131.5	131.2	131.2	131		
	.20	20	"	128.2	128.2	127.7	127.7	127.7	127.7	127.2	128.5	128.5	128.2	128	128	127.7		
	.40	40	"	123	122.7	122.5	122.7	122.5	126.7	126.5	127	126.7	126.7	126.5	126.5	126.2		
	1.00	60	"	122.2	121.7	122.5	122.5	122.2	122.7	122.5	123.5	123.2	123.7	122.5	122.5	121.7		
	1.00	"	"	96.7	98.2		98.2		96.5	98.5	97			99.2		71	Temp.	
	.20	80	"	120.2	120.2	120.2	120.2	120.2	121	120.5	121.2	121.7	122.2	121	120.7	119.7		
	.40	100	"	119	117.7	120.	120.	120	119.5	119	120.7	120	121.2	119.7	119	118.7		
	2.00	120	"	117.7	117	118.7	119.	119.	118.7	117.7	119	119.	120.2	118.7	118	116.7		
	2:00	"	"	97.	98.5		101.7		98.7	101.		103.7		100.7		71	Temp.	
	20	140	"	116.7	115.2	117.	117.2	117.2	117.	116.2	117	118	119	117.2	116.5	115		
	40	160	"	115.2	113.7	115.7	115.7	115.7	115.	115.	116	116.7	117.7	115.7	115.2	113.		

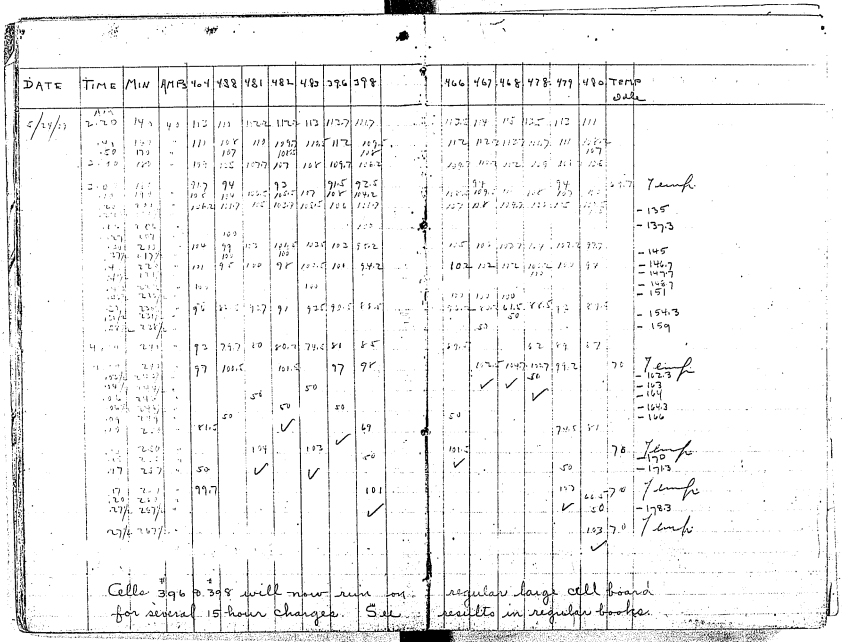
DATE	TIME	MIN	AMPS	404	488	481	482	483	396	398		466	467	468	478	479	490	TEMP. Celc	
5/21/09	2:00	180	40	1135	1117	114	1137	114	1172	1122		1142	115	1172	117	1132	1102		
	2:00	"	"	1100	1042		1037		1002	1027			106			~		71	Temp
	:2	200	"	1097	108	1112	1105	111	111	1085		111	1117	1127	1105	1097	1106		
	:30	210	"	1072	1052	100	108	109	1087	1057		1004	110	1112	1087	107	1027		
	:40	220	"	1045	103	1077	1062	1076	1062	1027		1064	108	1107	1062	1037	100		146.7
	:50	230	"	1019	100	106	1042	1047	1025	1002		104	106	109	1042	1012	972		153.3
	21	231	"							100									154.
	:53	233	"													100			155.3
	:53½	233½	"	100															155.7
	:57½	237½	"						100										158.3
	4:00	240	"	972	95	103	101	1025	982	967		100	101	1022	100	97	942		160.
	4:00	240	"	1034	1077		107		1035	106			109.2			104		71	Temp
	:03	243	"				100						100						162.
	:04	244	"											100					162.7
	:05	245	"					100											163.3
	:07	247	"			100													164.7
	:10	250	"	93	89	971	967	962	905	93		937	877	X 0	87	925	907		166.7
	:16½	256½	"										150 ✓	✓	150				171.
	:20½	260½	"						150						✓				173.7
	:21	261	"	86	68	76	87	150	✓	857		75				832	85		174.
	:26	266	"		150	150		✓											177.3
	:27½	267	"			✓	150					150							178.
	:30	270	"	137			✓			65		✓				545	545		
	31	271	"	150												150			180.7
	34½	274½	"							50						✓			183.
	:41	281	"							✓							150		187.3
																	✓		

DATE	TIME	MIN	AMPS	484	488	491	482	493	396	398		466	467	468	478	479	490	TEMP Delta	
	Charge			124	77		(95)		159	190		(106)		108		(108)			
	PM																		
5/21/09	4.55	0	30	113.2	117.		115.		112.7	114.7			116.5			113.2		71.	Temp
	5.55	60	"	107.2	112.		109.		107.2	111.			112.2			109.		71	"
	6.55	120	"	103.	108.5		105		103	107.			109			104.7		71.2	"
	7.55	180	"	99.5	104.		101.5		99.	102.5			105			101		71.2	"
	8.55	240	"	96.5	99.5		97.7		95.7	99.5			101.5			98.5		71.5	"
	9.55	300	"	95.5	98.2		96.7		94.7	98.2			100.7			97.5		72	"
	10.55	360	"	94.5	97.2		96.		94.	97.2			99.5			96.7		72	"
	11.55	420	"	95	98		96.2		95.7	97.5			100.2			97		72	"
	11.55	420	"	178	178	175.2	175	176	182	179		174	177	179	177	176.2	176.2		
							Discharge												
5/22	AM																		
	12.00	0	40	146	148	143.2	143	145	145	146		143	145	145	142.5	144.7	145		
	.01	4	"	134	133.7	133	132	133	131.7	134		134.2	133	133.2	132.5	132	133.7		
	.10	10	"	131.5	131.5	132	131.2	131	132	132		132.2	132	132	132	132	132		
	.20	20	"	128.5	128.2	128	128.2	128	128	131		129	129	128.5	129	129	129		
	.40	40	"	125.5	125	125	125.5	125	126	126		126	126	126.2	126.5	126.7	126		
	1.00	60	"	122.5	123	122.2	123	123	123.2	123		123.2	123	124	123	123	122.2		
	1.05	65	"	95	103.7		101		97.7	100			102.5			100.2		72	Temp
	.20	80	"	123.5	124.2	124	124.5	124	124.5	124.2		124.2	124.2	124.2	124	124.2	124.2		
	.40	100	"	119	119.2	120	120	120	119.7	119		120	120	120.2	120	119.5	119.2		
	2.00	120	"	115	115.5	115.2	115.5	115.5	115.2	115.2		117	117	117	117	117	117		
	2.00	121	"	99	103		101.7		99.7	100.7			104.5			101.7		72	Temp
	.20	141	"	111.2	114	117	117	117	117	116		117.5	117.5	117	117	117	115.5		

DATE	TIME	MIN	AMPS	404	488	481	482	483	394	398	466	467	468	472	479	480	TEMP Edlo	
5/22/91	2:40	150	40	115	112.5	112.5	116	115.5	116	114.5	114	116.5	114	112	115.5	113.5		
	3:30	180	"	113	111	113	112.5	113	113.7	112	114	116	115.2	114	113	113.2		
	3:00	120	"	101	104		104		99.5	102.7		103.5			102.5		71	Temp.
	2:20	200	"	109	107		110	113	112	110.2	104	111	112	114	111	108.7	112.5	
	1:40	120	"	104	102		102	105	104	102.5	102	102.2	104.2	111	107	105	103.5	148.3
	1:20	240	"		101													150.
	1:00	240	"	100	97.7	114	101.7	114	102.2	100	103	105	104	106	111	97.5		153.3
	0:40	240	"												100			156.7
	0:20	240	"				120		120									157.3
4:00	2:40	240	"	97	93.7	121	98	111	95	96	100	109	101	110	97.5	94.2		160.
	4:20	240	"	103	103.7		104.7		102	104.5		109.5	109		105.5		71	Temp.
	:31	248	"															160.7
	3:03	243	"			100		100										162.3
	:24	241	"															162.7
	2:47	247	"										50					165.
	2:19	247	"	92	96	94	94.7	92	87.7	91	87.7	92		96.5	92	91.5		Temp.
	:12	247	"									50		50				170.
	1:54	247	"															171.
	1:36	250	"									111	109.5	105.5			71	Temp.
	1:19	250	"					50										173.
	1:00	250	"	85	75.5	75.5	71		50	68.5	75	✓	✓	✓	85	88		173.3
	:42	250	"			50												174.3
	:23	250	"				50											175.3
	:03	247	"		50													176.7
	2:43	243	"								50							176.3
	:23	250	"															
	:03	250	"		110.5	110	109.5	109.5	105		108						71	Temp.
	2:43	247	"	50			✓	✓	✓	✓	✓							179.7
	:23	247	"							58.2					52.5	72.5		
	:03	247	"							50					50			181.3
	1:43	243	"															182.
	:23	243	"															
	:03	243	"												110		71	
	1:43	240	"	106						106.5					✓	50		186.7
	:23	240	"							✓						107.5	71	Temp.
	:03	240	"													✓		



DATE	TIME	MIN	AMPS	404	488	481	482	483	396	398	466	467	468	478	479	480	TEMP Idle
5/22/09																	



DATE	TIME	MIN	AMB	464	468	481	482	483	396	398	466	467	468	478	479	480	Temp data
5/11/93	2:20	143	43	113	113	112.2	112.7	113	113.7	111.7	113.2	114	113	113.5	113	111	
				111	113	113	113.7	113.2	113	113.7	114	113.2	113.2	113.7	111	113.7	
							100.2			100.2					100.7		
	2:40	163	"	113	113	113.7	113	113.2	113.7	113.2	113.7	113.7	113.2	113.5	113	113.5	
															94		7 temp
	3:0	223	-	93.7	94		93	93.5	92.5								
				100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	- 135
										137.3							- 137.3
					100												
				100	93	100	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	- 145
					100		100										
				100	93	100	93	100.2	100	100.2	102	102	102	102	94		- 146.7
																	- 147.7
					100			100									- 148.7
																	- 151
											100	100	100				
				95	95	95.7	93	93.5	93.5	93.5	95.5	95.5	95.5	95.5	93	93.5	- 154.3
													50				- 159
				92	93.7	50	90.7	93.5	91	95	93.7			92	93	93.7	
												102.2	102.2	102.2	93.2	93	7 temp
				97	100.5		100.5		97	97		✓	✓	50			- 162.3
														✓			- 163
						50		50									- 164
							50		50								- 164.3
					50						50						- 166
				81.2		✓			69						94.5	93	
						104		103	✓	50							78 temp
											101.2						- 170
				50		✓		✓			✓				50		- 173
				99.7					101						103	77	7 temp
									✓						✓	50	- 178.3
																103	7.0 temp
																✓	

Cells 396 & 398 will now run for regular large dell board for several 15 hour charges. See results in regular books.

DATE	TIME	MIN	AMPS	404	498	421	432	473	466	467	468	478	479	480	TEMP Delta	
5/24/01	[illegible]	[illegible]	[illegible]	126	99		(97)		(104)		110		(113)			
	4:55	"	30	103	102.4		102.5			102.5			104.4		70	
	5:55	60	"	102	97		102.9			102.9			103		72	
	6:55	120	"	98	102.4		97.5			99.5			99.4		72.5	
	7:55	180	"	96.2	101		96.5			97			97		74	
	8:55	240	"	94.5	98		96.2			94.7			94.5		70.5	
	9:55	300	"	94	98		94.5			95.5			95		71.2	
	10:55	360	"	94.2	97.2		96			96			95.5		72.5	
	11:55	420	"	96	98.2		96			98.2			96.7		73	
				1801	1761	1267	1752	1761	1802	1779	1779	1777	1783	1779	VOLT READING	
5/25/01	Discharge			120	79		97		108		110		110			
	12:00	0	40	1446	1432	1314	1442	1417	1473	1432	1427	1417	1411	1376		
	1:04	1/.	"	12905	12872	12897	12872	1237	1290	12878	1287	12872	12857	12845		
	1:10	10	"	12805	12805	120	1301	1300	1301	1312	121	1321	131	1307		
	1:20	20	"	1282	120	1317	128	1277	1282	1287	1287	1282	1282	1282		
	1:40	1/0	"	1282	125	1277	125	1247	1255	1257	126	1252	125	1242		
	2:00	60	"	1222	1217	1215	1227	12225	1227	1232	124	12225	1222	12217		
	1:00	"	"	995	103		1012.5			103			1015	74.5		Temp.
	2:20	80	"	1205	1179	121	1212	121	1207	1217	1225	121	1207	1199		
	4:00	100	"	1172	118	120	1202	120	1197	1202	122	120	1195	1182		
	2:05	125	"	118	1162	1182	1185	1182	1182	1172	1202	1185	118	1165		
	2:05	"	"	1072	1062		105			1067	1067		104	75.2		Temp.
	12:00	140	"	112	1145	1165	1145	117	1145	118	119	117	1165	114		
	4:00	160	"	1147	1127	115	1145	115	1145	1162	1177	1157	115	1132		

DATE	TIME	MIN	CUMS	476	478	481	482	483	486	487	464	478	479	480	TEMP Idle	
4/24/09	3:00	180	4/0	.1126	.1132	.1125	.1122	.1127	.1135	.1145	.1116	.1137	.1127	.1102		
	3:00	"	"	.1106	.1109		.1087			.1107			.1064		767	Temp.
	3:00	200	"	.1109	.1065	.1077	.1082	.110	.110	1.112	.1137	.1102	.1074	.1106		
	1:30	210	"	.1064	.1074	.1082	.1063	.1082	.108	.1102	.1122	.1097	.1078	.1032		
	1:30	220	"	.1032	.101	.1062	.1054	.1062	.1035	.108	.1104	.1062	.1042	.1002		
	1:30½	220½	"											.100		149
	1:31½	221½	"		.100											149.7
	1:50	230	"	.1002	.98	.1042	.1022	.1042	.1022	.1047	.1032	.1042	.1012	.98		
	2:01	231	"	.100												154
	2:55½	235½	"										.100			156.
	2:56½	236½	"						1.00							157.
	2:57½	237½	"				.100									158.3
	2:59½	239½	"									.100				159.7
4/25	1:00	240	"	.97	.967	.101	.987	.1007	.977	.100	.100	.987	.977	.962		160
	1:00	240	"	.110	.113		.114			.1152			.111		762	Temp.
	1:00½	240½	"					.100								161.7
	1:02½	242½	"													162.3
	1:03½	243½	"			.100										164.7
	1:07	247	"								.50					
	1:10	250	"	.921	.960	.932	.922	.902	91	.80 .50		.78	.935	.922		169.3
	1:14	254	"								✓	.50				170.
	1:15	255	"					.50								171.7
	1:17½	257½	"													173.
	1:19½	259½	"			.50				✓						
	1:20	260	"	.879	.962	✓	.50	✓	.68				.857	.897		173.3
	1:22	262	"		.50					.50						174.7
	1:23	263	"				✓		✓							175.3
	1:30	270	"	.50									.652	.762		180
	1:31	271	"										.50			180.7
	1:32	272	"										✓	.50		186.
														✓		

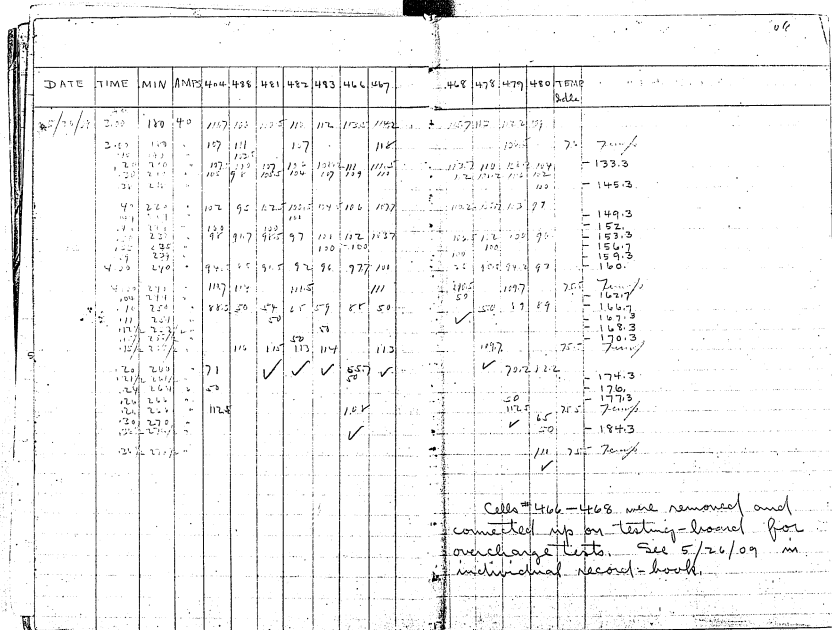
DATE	TIME	MIN	AMB.	484	483	482	481	480	479	478	477	476	467	462	478	477	480	TEMP IDLE	
7/13/4	Recharge		127	80			(98)						(109)			(111)			
	PM																		
	1/55	0	30	117.5	120			121					122.7			119.5		76.5	Temp
	5 55	60	"	115.5	119			114.2					116.			113.5		76.5	"
	6 55	120	"	108.5	112.5			107.2					109.5			107.5		77	"
	7 55	180	"	1057	1092			1037					107.5			105.		76.7	"
	8 55	24	"	102.7	106.			102.					104.			103		76.2	"
	9 55	300	"	100.	103.5			99.5					102.2			101.7		74.7	"
	10 55	360	"	99.5	102.2			99					100.7			997		74.5	"
	11 55	1/20	"	99	102			99					100.7			99.5	"	74	"
	12 55	1/50	"	178.5	176	179.5	176.5	176.5	176.5	176.5	176.5	176.5	178.2	176.5	176.5	176.5	176.5		VOLT READING
								Discharge											
5/25	12 00	0	40	145	140	143	144.5	144.5	144.5	144.5	144.5	144.5	144.5	144.5	144.5	144.5	144.5		
	04	4	"	133.5	133.5	133	133	134	134	134	134	134	134	134	134	134	134		
	16	16	"	131.7	131.7	131	131	131	132	132	132	132	132	132	132	132	132		
	28	28	"	129	129	128.5	128.5	128.5	129	129	129	129	129	129	129	129	129		
	40	40	"	125.5	125.5	125.5	125	125	125	125	125	125	125	125	125	125	125		
	1 00	60	"	123	123	122	123	123	123	123	123	123	123	123	123	123	122		
	1 00	60	1	121.5	121.5	121	121	121	121	121	121	121	121	121	121	121	121	73.7	Temp
	20	80	"	120.5	120.5	120	120	120	120	120	120	120	120	120	120	120	120		
	40	100	"	119.5	119.5	119	120	120	120	120	120	120	120	120	120	120	120		
	2 00	120	"	118.5	118.5	118	118.5	118.5	118.5	118.5	118.5	118.5	118.5	118.5	118.5	118.5	118.5		
	2 00	120	"	103.5	103.5	103	104.7	104.7	104.7	104.7	104.7	104.7	104.7	104.7	104.7	103	104.7	73.7	Temp
	20	140	"	117.5	117.5	117	117.5	117.5	117.5	117.5	117.5	117.5	117.5	117.5	117.5	117	117.5		"

DATE	TIME	MIN	AMPL	404	488	481	492	483	466	467	469	478	479	470	TEMP Idle	
2/22/93	2:49	11:1	40	119.2	112	114	114	115	115.7	116	117.2	115.7	115	112		
	3:00	11:1	"	117.2	113.7	112	111.5	113	114	114.5	116	113.7	113	110.7		
	3:09	11:1	"	115.7	113.7		107			107				115.2	74	Temp
	:20	2:03	"	109	112	113	107.7	109.2	111	111.7	113.7	113.2	115.7	113.7		
	:30	2:13	"	106.7	112	107	106	107	109	109	110.2	109	110.2	113		
	:40	2:23	"	103	108	105	103	106	106.7	105	107.7	107.7	107.7	110		146.7
	:47	2:30	"	100	107.7	102	100	103	103.2	103.5	107.7	107.7	107.7	97		153.3
	:55	2:38	"			100							110			156.7
	4:05	2:48	"													157.7
	:15	2:58	"						100.2			110	112			158.7
	:29	3:12	"								110					159.3
	4:39	3:22	"	96.2	97	97	96	100	99.5	100	97	97	97	97		160.
	4:50	3:33	"	107.2	112.5		109.2			110.5	110.2		108		72	Temp
	:00	3:43	"								50					163.3
	:10	3:53	"	92	82.2	92.7	86	87	92	91.5	94.7	94.7	92	98.5		
	:15	3:58	"							50	✓	50				169.7
	:25	4:08	"					50								170.
	:35	4:18	"							✓						170.3
	:47	4:30	"			50										171.7
	5:00	4:43	"					50								172.
	:12	4:55	"	85	88				73			92	95.7			173.3
	:20	5:03	"		111.5	114	113.7	113	110.5	50		109.7			73	Temp
	:30	5:13	"									✓	50	94.5		176.
	:40	5:23	"	50		✓	✓	✓	✓				50			180.
	:50	5:33	"										112			190.3
	6:00	5:43	"	111.2									✓	50	73	Temp
	:40	6:20	"											✓		187.

DATE	TIME	MIN	AMPS	464	469	481	457	453	466	467	468	478	479	480	TEMP. Jolle	
							(99)		(110)		112		(112)			
	4:55		50	113.2	124.5		114			113			114	73	Temp	
				114.2	117.5		112			113			112.2	73	"	
				112.2	117.5		105.5			107.5			105.5	73	"	
				107.7	108.5		102.2			107.2			102.2	72.2	"	
				105	106.2		100.2			102			100	72.7	"	
				100	102.5		98.7			100.2			98.5	74	"	
				99	100		99			99.7			98.7	74.5	"	
				100	103.5		99			101.5			99.2	75	"	
				177.9	136.5	124	114.2	120.5	130.2	118.2	118.7	117.2	118	118.7	VOLT READING	
8/24		Discharge		128	81		(99)		(110)		112		(112)			
	12:00	0	%	139.5	139.7	130.5	125.5	132	132.7	132.7	130.5	128.7	128.5	128.5		
	:04	4	"	133.7	133.5	133	132.5	132.5	133.7	133.7	133	133.5	133.2	133.2		
	:10	10	"	130.7	130.5	130.2	130.5	130.5	131.2	131.2	131	130.7	130.5	130.5		
	12:20	20	"	128.2	128.1	128.1	128	128.2	128.2	128.5	128.4	128.2	128.1	128.1		
	:40	40	"	126.2	126.2	126.7	126.7	126.7	126.7	126.5	126	125.2	125.5	125.7		
	1:00	60	"	122.2	123.2	124.5	122.5	122.5	123.5	123.4	124.1	123	122.2	122.2		
	1:00	"	"	103	106.7		104			104.5			104	76	Temp.	
	:20	80	"	120.2	118.5	121	121.2	121.2	121	121.7	122.2	121.2	120.1	119.9		
	:40	100	"	119.2	117	117.7	120	120	120	120.2	121.7	120	119.5	119.2		
	2:00	120	"	117	116.2	118	118.2	118.2	118.5	117.2	120.2	118.5	118.2	117		
	2:00	"	"	105	110		107.5			107.7			106.7	77	Temp.	
	:20	140	"	116.2	115.5	116.2	116.5	117	116.5	116	119.2	117.7	116.7	116.5		
	:40	160	"	116	116.5	114.2	114.2	114.7	116	116.2	117.5	116.5	116.5	113		

DATE	TIME	MIN	AMPS	484	485	491	492	493	466	467	468	478	479	480	TEMP Adder	
5/20/97	3:00	180	70	1122	108	1172	1117	113	1142	1115	1162	114	1135	1104		
	3:30	"	"	109	1137		111			112			109.7		78	Temp.
	12:0	200	"	1092	1025	109	109	110	1135	1122	114	100	1097	1062		139.3
	12:9	207	"		100						1125	109	1072	1039		
	13:0	210	"	1064	977	1072	1059	108	1077	1065						
	1:0	220	"	1027	962	1025	1022	1064	1072	1082	1107	107	1072	100		150.3
	1:30½	220½	"											100		
	2:0	230	"	1002	935	1024	1005	1037	104	1007	108	104	101	992		154.
	2:1	231	"	100												154.7
	2:2	232	"				100						100			156.3
	2:7½	237½	"													158.
	2:54½	236½	"			100						100				159.7
	2:59½	239½	"								100					160.
	3:00	240	"						100	100						160.3
	3:00½	240½	"													161.
	3:01½	241½	"					100								
	3:01	244	"	1942	1825	937	94	962	772	925	50	91	948	94		163.3
	3:05	"	"	113	1167		116			1162	✓		1172		79	Temp.
	1:0	250	"	92	1693	1825	88	1822	925	672		717	1825	93		169.3
	1:2½	252½	"							550						168.7
	1:3	253	"		550											169.7
	1:7½	257½	"							✓		550				170.
	1:8	258	"				550	550	✓			✓				170.3
	1:8½	258½	"		550	550	✓	✓								171.7
	1:7½	257½	"		✓	✓			1066							
	2:0	260	"	2785					550				80	1877		174.7
	2:2	262	"													177.
	2:6½	266½	"	550									550			179.
	2:8½	268½	"						✓					777		187.3
	2:30	270	"											550		
	4:1	281	"											✓		

DATE	TIME	MIN	AMPS	404	488	481	492	493	466	467	468	478	479	490	TEMP Delta
5/24/09	Charge			#29	#2		(#001)		(#11)		#13		(#13)		
	4:55	0	30	120.7	126.2		124.2						123	Pack	Temp
	5:55	60	"	117.2	123		116.5						116	80	"
	6:55	120	"	111.5	116.		109.7						109.5	78.5	"
	7:55	180	"	107	112		105						105	78	"
	8:55	240	"	104.	109.		103.						103.5	77.7	"
	9:55	300	"	101.7	106.		100.7						101.7	77.5	"
	10:55	360	"	101.	104.5		100.						101.	77.2	"
	11:58	420	"	100	104.		100						101.2	77	"
	11:55	"	"	177	175	173.2	173.2	174.2	178.2	174	177.2	175.7	175.7	176.	VOLT READING
						Discharge									
5/26/09	AM 12:00	0	40	144.7	143	142.2	142.2	140.5	142	142	143	140	139.7	139	
	04	4	"	133.7	133.7	133	133	133	133.7	133.7	133	133.2	133.2	133.2	
	10	10	"	131	130.7	130.7	130.5	130.2	131	131	131	131	131	131	
	20	20	"	127.2	127	126.7	127	126	129	129	129	129	129	129.5	
	40	40	"	125	124	124.5	125	124.5	125.5	125.7	126	125	125	125.5	
	1:00	60	"	122.5	122.	122.5	123	123	123	123	123.5	124	123	122	
	1:00	60	"	103	106		103.5			104.5			103	76.7	Temp
	20	80	"	120	118.5	117.2	120.2	117.2	120.2	118.5	119.7	120.2	120.5	120.5	
	40	100	"	119	116.5	115.5	119.5	116.7	120	120	120	120	120	116.2	
	2:00	120	"	117.7	115	117.7	117.7	114.2	117.5	119	120	116.5	118	116.5	
	2:00	120	"	104	109		103			106.5			104.5	76.5	Temp
	20	140	"	116.2	112.7	116	116	117	117.5	118	117	117.5	117	115	
	40	160	"	114	109.7	113.5	113	114.5	115.7	116	117.5	115	114.7	112	



Cells #466–468 were removed and connected up on testing-board for overcharge tests. See 5/26/09 in individual record-book.

DATE	TIME	MIN	AMPS	464	468	481	482	483	478	479		480	TEMP Sable	
5/24/		Start		120	123	(101)				(114)				
	4:25	0	30	113	122.5		117.5			120.5			75	Temp
				112	117.2		111			110			72	"
				115	119.2		107			107			74	"
				107	111		102.5			103.5			76.5	"
		240	"	1037	1077		1022			1007			767	"
			"	1005	1042		992			98			74	"
			"	987	102		97.5			96			745.2	"
			"	98	1017		97			9452			745.2	"
			"	1776	1743	1723	1737	1794	1762	1784			1771	VOLT READING
	Discharge													
5/26	12:00 P.M.	0	40	134.2	134.4	133.4	133.5	133.5	134	134.2			134.2	
	:04	4	"	133.7	133.5	133.5	133	133	133.7	133.7			133.5	
	:15	15	"	120	1296	1296	1292	129	1277	1291			1286	
	:20	20	"	1282	128	128	128	1277	1282	1282			128	
	:40	40	"	1245	1272	1276	1265	1265	1265	1285			1272	
	1:00	60	"	1222	1212	1222	1225	1225	1225	1222			1217	
	1:00	"	"	1005	1026		1007			987			757	TEMP
	:20	80	"	1205	1172	1212	1212	1207	1205	1205			1197	
	:40	100	"	1182	1165	1182	1197	1197	1182	1186			1177	
	2:00	120	"	1172	1147	1177	1182	118	118	1174			1162	
	2:00	"	"	1012	106		1025			101			765	"
	:20	140	"	117	1127	116	116	1162	1145	1162			1146	
	:40	160	"	119	110	1137	1126	114	1152	1172			1122	

DATE	TIME	MIN	AMPS	484	488	481	482	483	478	479		480	TEMP Yoke
6/26/09	3:00	180	40	1122	1062	1107	1102	1117	1113	1122		1087	
	3:00	"	"	1037	1025		1045			1022			Just TEMP
	:20	200	"	1087	101	1077	1067	1082	110	1085		104	— 137.
	:25½	205½	"		1.00							1.017	— 144.
	:32	212	"	105	.1972	105	1027	1057	1077	1052		1.00	
	:36	216	"										
	:41	221	"	103	.96	1022	1015	104	106	1032		.971	— 149.7
	:41½	221½	"				1.00						— 152.
	:48	228	"	100						100			— 152.7
	:49	229	"										— 153.3
	:50	230	"			100			100				— 157.
	:47½	237½	"							1.00			— 158.3
	4:00	240	"	955	8665	932	93	96	972	945		922	
	4:00	"	"	107	1115		1095			1047			70 TEMP — 169.3
	:14	254	"		50				50				— 170.3
	:15½	255½	"			50		50		✓			— 171.7
	:17½	257½	"				50						— 179.3
	:21½	261½	"	50		✓	✓	✓		50			— 179.7
	:27½	267½	"									.692	
	:30	270	"							✓		50	— 195.7
	:38½	278½	"									✓	
6/26/09	Charge			#131	#84		102			(#114)			
	4:55	0	30	103	1115		1085			109		74.5	Temp
	5:55	60	"	109	1147		108			1067		74.2	"
	6:55	120	"	105.	111.2		103.5			103.		74.5	"
	7:55	180	"	101.2	1077		100.7			100		74	"
	8:55	240	"	97.5	1042		975			97.2		73.5	"
	9:55	300	"	98.	1025		97.7			97.5		74	"
	10:55	360	"	95.5	102		98.			98		75.5	"
	11:55	420	"	99	1027		98.5			999		76	"
	11:55	"	"	173	1757	1737	1742	1.75	1.77	1178		174	VOLT READING

DATE	TIME	MIN	AMPS	494	493	491	492	483	478	479		486	TEMP Rdg	
8/27/11	Discharge													
	12:00	"	4	144	143	142	142	141	142	142		142		
				133	133	132.6	132	132	133	133		133		
				130.1	129.9	129	131	130	131	131.2		131.0		
				126	127.2	126	127	127	127.2	126.6		126.6		
				124	125.5	125	124.5	124.3	124.3	124.2		124		
	1:00			122	123.1	122.6	123	123.2	123.2	122.6		122		
	1:30			121	120.6		120.6			120.6			76	Temp
	2:00			118	119	118.1	118	118	118	118.6		118.0		
				116	117	116.7	116.9	116.8	116.9	116.9		116.2		
	2:30			114	115.2	115.4	115.4			115.4		115	76	Temp
				116	112	116.2	116.2	116.2	116	116.5		115		
	3:00			114.2	111	114	114	114.5	114.7	114.5		113		
	3:30			111.2	109	111	111	111.7	112.1	111.6		110.7		
	4:00			108	107		107.6			107.6		106	74.6	Temp
				106.7	104.7	106.7	106							
				107.7	103	103.2	103.4	104	104	104.7		104		
					100									
				105	101.6	106	104.5	105.5	105	104.5		103		- 137.7
				101.2	100	102.7	102.5	103.4	103	103		102		- 146.7
				102										- 150.7
							100							- 152
				97.7	93	100	99.5	101	100.5	100		97		- 153.3
								100						- 155.3
								99						- 158.7
	4:30			94.2	90.5	94.6	94.5	96	97.6	97		94.5		
				107	113.5		111		105	105				
				90	88.2	87	87	78	79.5	84.7		91	76.5	Temp
					60			50						- 169
									50					- 169.3
						50								- 170
														- 172.3
				79			50			83		76.5		- 177 Cells # 551, 552, 568, + 569 were
				60										connected in Endmanuel Section.
										84.5		77		- 180 after this discharge, for 12 mins.
										82		50		- 186
													76	Cell # 398 connected in for
				112.5	110.5	111.4	111.7	111.5	111.4	112.5		111.4		50 mins in middle of charge (See over)

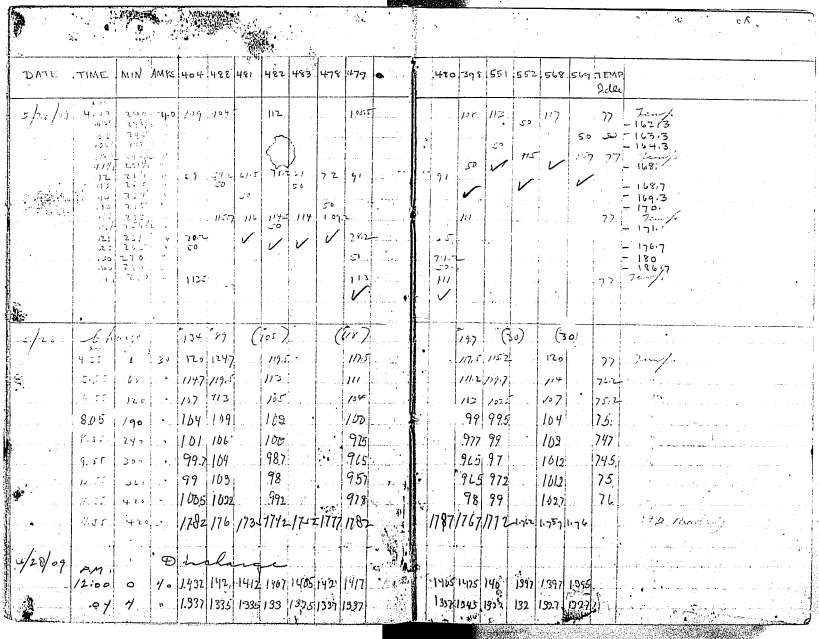
DATE	TIME	MIN	AMPS	484	488	421	482	483	478	479	480	398	155	552	558	569	TEMP Side	NOTES
5/27/09				*132 *85			(103)			(116)		*195	(72)			(72)		
							117			117			88			92.5	76.5	
		10		114	118		112			109			91			94.5	76	
				104	112		105			104			94			91	76.5	
				106	1105		1047			103			94			92.7	76.5	Current off 1 min. at 8:35 while connecting in cell #398
				101	107		109			99			87	94		97.2	76	
				100	1045		995			98			89	95		98	76	
				160	103		99			98			91	96		99	76	
				107	107	107	107	107	1082	1077		107	1077	1072	107	1067	1060	
5/27/09	Discharge																	
	12:00	0	40	1145	1132	1122	112	1117	113	1125		112	1132	1127	1145	1999	1132	
	10	4	"	1337	1335	1332	133	1327	1337	1337		1337	1305	1328	1327	1398	1336	
	1:0	10	"	1310	1312	131	1307	1309	1312	1312		131	1267	130	1297	1302	130	
	2:0	20	"	1284	1284	1282	1281	1278	1287	1287		1285	1264	1287	1255	1281	128	
	4:0	40	"	1257	1240	1242	1257	1252	1249	1255		1252	1212	1277	1246	1255	1254	
	10:0	60	"	1222	1215	1205	123	1227	1227	1225		122	1182	1222	1222	1225	1215	
	1:00	"	"	102	100		103			101			96	100		104	765	TEMP
	12:0	80	"	130	1187	121	131	1207	1212	1207		1197	1147	1211	1202	1205	1207	
	4:0	100	"	1185	117	1155	1177	1172	1197	1197		1182	1087	1187	1185	1191	1172	
	4:30	100	"										1100					
	2:00	120	"	1172	1162	1177	1182	1172	1185	118		1167	62	1177	1172	1177	1175	T 69
	2:00	4	"	1027	108		59			1068			101	102		106	752	TEMP
	.03½	2-30	"															T 82.3
	12:0	140	"	1137	1127	1167	1148	116	1172	1167		115	1116	1167	1167	1167	1167	
	4:0	160	"	1187	1202	1207	1207	1207	1197	1197		1187	1142	1197	1197	1197	1197	

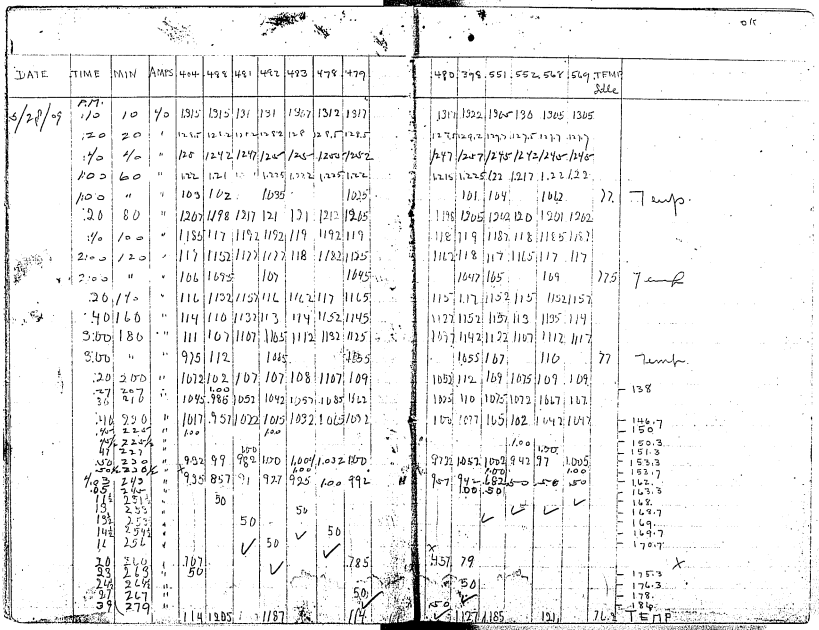
DATE	TIME	MIN	AMPS	484	488	481	482	483	478	479
5/27/09	3:00	180	40	1107	1062	1108	1102	111	1134	1122
	3:00	180	"	104	118		07			106
	:10	200	"							
	:27½	207½	"		100					
	:38½	218½	"							
	:40	220	"	100	945	1012	1002	1022	1055	102
	:43	223	"				100			
	:44½	225	"			100				
	:48½	229½	"							100
	:50	230	"	97	922	977	972	100	102	99
	:54½	234½	"						100	
	:57	237	"							
	:58½	238½	"							
	4:00	240	"	935	867	991	925	932	967	962
	1:00	240	"	1077	1135		112			109
	:08½	248½	"							
	:08	248	"							
	:10	250	"							
	:11	251	"							
	:12	252	"							
	:12½	252½	"			50				
	:13	253½	"					50		
	:14	254	"			✓	50	✓	50	✓
	:14	255	"							
	:23	263	"	50						56
	:25½	265	"		✓					50
	:26	266	"							✓
	:36½	276½	"							

488	551	552	568	584	TEMP Pulse	
1092	1125	1117	1122	1126		
	119	107		109	75	TEMP
						135.
1.00						145.7
785	106	1032	1055	1052		146.7
						148.7
						150.
						152.3
965	1036	100	1021	102		153.3
			100	100		156.3
						158.
942		100				158.3
	96	892	872	917		
	118	110		114	765	TEMP
			50			163.7
				50		165.3
		50	✓	✓		166.7
		✓				167.3
						168.
						168.3
	50					169.
	✓					170.
782						174.7
50						177.3
✓						184.3

	change		133	86	(100)		(117.)		796	(79)	(291)
5/27/09	4:55	0	30	1137	120		111		1142	1058	1087	765	Temp
	5:55	60		116	126		113		116	110	114	76.	"
	6:55	120		110.5	115.		107.5		106.7	107.	110.	76.5	"
	7:55	180		107.2	112		106		104.2	105.	107.	77	"
	8:55	240		104.	109		103.7		102.	103	105.5	77.2	"
	9:55	300		103.5	107.2		102.5		101.7	102.5	105.	77.5	"
	10:55	360		103	1007		102		100	102	105	77.1	

DATE	TIME	MIN	AMB	404	403	401	402	405	406	407	408	409	410	411	412	413	414	415	416	TEMP IDLE
5/27/19																				



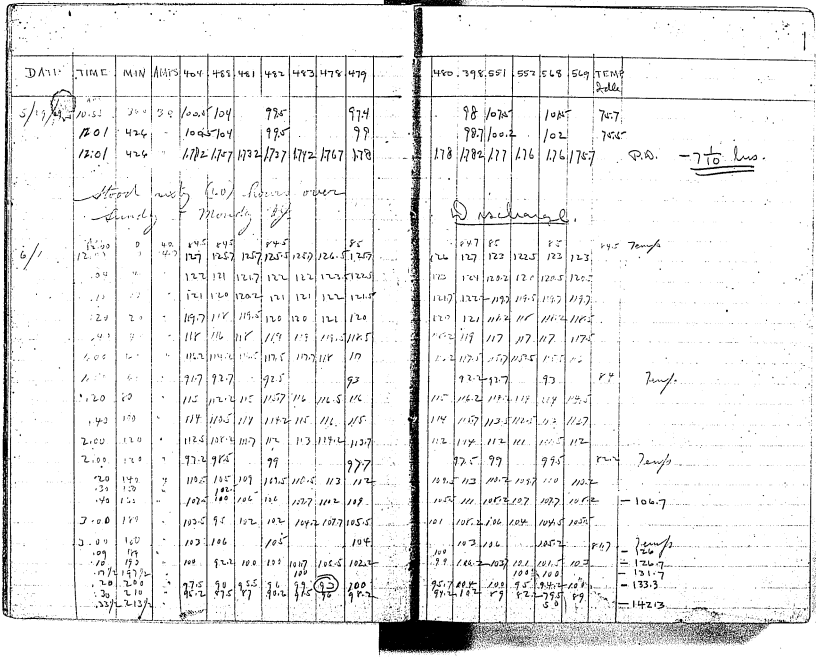


DATE	TIME	MIN	AMPS	444	448	451	452	453	478	479	480	398	551	552	562	569	TEMP
5/28/09	:10	10	40	1315	1315	131	131	1967	1312	1317	1314	1322	1365	136	1305	1305	
	:20	20	"														
	:30	30	"														
	:00	60	"														
	:00	"	"	103	102		1035			1035		101	104		1042		77 Temp
	:20	80	"	1205	1198	1217	121	121	1213	1205	1196	1205	1202	120	1201	1202	
	:40	100	"	1186	117	1192	1192	119	1192	119	1187	119	1187	118	1185	1187	
	2:00	120	"	117	1152	1172	1172	118	1182	1185	1162	118	117	1165	117	117	
	2:00	"	"	106	1685		107			1845		1047	105		109		775 Temp
	20	140	"	116	1132	1152	112	1162	117	1165	1152	117	1152	1157	1152	1152	
	40	160	"	114	110	1132	113	114	1152	1145	1122	1152	1157	113	1195	114	
	3:00	180	"	111	107	1107	1105	1112	1132	1125	1157	1142	1122	1107	1112	117	
	8:00	"	"	975	112		1145			1355		1055	1067		110		77 Temp
	:20	200	"	1012	102	107	107	108	1107	109		1052	102	109	1025	109	
	:27	207	"	1045	100 986	1052	1042	1057	1087	1023		1095	110	1025	1072	1067	1073 138
	:30	210	"	1017	957	1022	1015	1032	1063	1051		1075	1077	105	102	1042	1047 146.7
	:40	220	"	100				100									150
	:47	227	"												100		150.3
	:50	230	"	932	99	100	1020	1007	1032	1020		9732	1052	1042	942	97	1005 151.3
	8:00	230	"					100						1072			100 153.3
	:03	233	"	935	857	91	927	935	100	992	H	907	94	682	80	86	80 162.7
	:05	235	"										100	80			163.3
	15	245	"			50											168
	25	255	"					50									169.7
	35	255	"			50											169
	145	2545	"														169.7
	11	251	"				50		50								170.7
	20	260	"	1067						785		957	79				
	23	263	"	50													175.3
	26	266	"														176.3
	27	267	"							50							178
	39	279	"														184
				114	1005		1187			114		1071	1185		121		76.4 TEMP

DATE	TIME	MIN	AMPS	404	498	481	492	483	478	479
6/28/09	charge			135	88		(106)			(79)
	4:45	0	30	118	131		120			1177
	5:45	60		107	1215		115			1135
	6:45	120		106	115		1117			110
	7:45	180		105	112		108			1075
	8:45	240		1052	110.		107.2			105.
	9:45	300		1055	1095		105			103.5
	10:45	360		1055	1082		103.7			102.5
	11:45	420		104.5	107.5		1042			102
	11:45	420		107	109.5	1772	173	1735	176	1745
6/28/09	Discharge									
	12:00	0	40	145	144	142	141.5	141	143	1417
	.04	4	"	1337	1337	1335	133	133	1337	1332
	.10	10	"	1317	131.5	131	131	131	1317	1317
	.20	20	"	129	1282	1282	1282	128	129	129
	.40	40	"	1265	125	125	1255	125	1255	1257
	1.00	60	"	122	1215	1212	123	123	123	1225
	1.00	60	"	1067	110		107			105.5
	.20	80	"	120.5	119.7	121	121.5	120.5	121.5	121
	.40	100	"	119	118	120	120	120	120	119.2
	2.00	120	"	1172	1157	1177	1172	117.2	119	1182
	2.00	120	"	1055	111.5		107.5			106
	.20	140	"	116	120.5	1155	1157	116	117	116.2
	.40	160	"	114	111	113	1135	114.7	1157	115

480.	398.	551.	552.	548.	549.	TEMP
				Idle		
		(198)	(31)	(31)		
		1112	1142	117	17	
		1125	1105	1135	77	TEMP
		109.	108	1097	775	"
		107.	1052	1075	78	"
		1052	1032	1055	782	"
		1035	103	1042	785	"
		1025	1035	1035	775	"
		1027	1145	107	794	"
171.5	170.5	176.2	171	1757	1755	P.D. READING
141	143	1395	139	139	1382	
1327	1332	132.2	132	132.5	132.5	
1307	1322	1302	132	131	1305	
123	1287	1277	1282	128	128	
1255	126	125	1276	1275	125	
122	123	122	122	122.5	1222	
		1055	1067	1095		Temp
120	121	1205	120	120.5	121	
119	120	119	119	119	119.5	
117	1165	117.5	117	117.5	1177	
		105	1077	1092	97	
115	117	115.5	1145	1155	116	
112	1166	114	113	114	1142	

DATE	TIME	MIN	AMPS	464	498	491	482	483	478	479	480	398	551	552	568	569	TEMP
																	Jelli
5/29/19	2:00 PM	180	93	111	101.5	112.2	110.5	111	113	112	109	119	111.5	113	111.5	111.5	
	3:00	780	"	132	117.5		119			106		107	119		112.5		77
	.20	740	"	1197	132	116.2	116.2	117	1005	108	95	1172	103	1222	103	1287	
	.30	710	"	105	115	115	119.5	1052	103	117	133	1062	1237	1197	1197	1197	— 140
	.40	670	"	102	97	112	112	114	107	1042	1237	1062	115	1197	1197	1197	
	.42	660	"								120						— 148
	.47	637	"	100		100	100							120	121		— 151.3
	.53	620	"	99	93	98	99	121	1042	100	95	102	100	982	93	103	— 153.3
	.58	610	"					100		100							— 155.3
	1:03	600	"												129		— 156.3
	.12	540	"											50			— 159.
	.20	490	"	757	69	96.2	94	92.7	100	97.2	95	103	50.5		123		— 160.
	.30	430	"										50		50		— 161.
	.40	370	"	109	114.3		112.2			1082		108	1137	1125	1177	114.7	745
	.50	310	"								120						— 168.
	2:00	250	"	90	257	62	81	73	82.5	92	90	92	✓	✓	✓	✓	
	.10	190	"			50											— 168.
	.18	130	"														— 149.7
	.30	70	"			✓	50		50								— 170.8
	.40	10	"	82				✓	✓	85	1172	91					
	.42	2:10	"	50			✓			65							— 177.3
	.50	2:00	"							50	172	62					
	3:05	1:55	"									50					— 180.3
	.21	1:39	"														— 180.7
	.31	1:29	"	112	119	114.5	1177	114	1137	112	50	1177				72	
	.40	1:20	"														— 186.7
	.43	1:17	"						✓	✓	1172	✓				72	
5/29	8:00 AM	0					(107)		(120)			199	(32)		(32)		
	4:30	0	30	117.2	114.5		1152		117			1152	1165		117	76	
	5:45	60	"	1165	120		1137		1165			115	1104		123	747	"
	6:55	130	"	116	116		1082		107			106	1065		1085	76	"
	7:55	190	"	107	111		107		103			1082	1097		1065	752	"
	8:55	250	"	1027	1072		102		99.7			100	1002		1037	745	"
	9:55	310	"	1002	1017		997		992			982	991		102	747	"



DAY TIME MIN AMPS 404 488 481 482 483 478 479 480 398 551 552 548 549 TEMP Folds

5/13/49 10:51 30 2.0 100.6 104 98.5 97.4 98 100.6 104.5 74.7

12:01 426 " 100.5 104 99.5 99 98.7 100.2 102 74.5

12:01 426 " 178.2 176.7 173.2 173.7 174.2 176.7 178 178.2 177 176 176.7 P.R. -7 to lus.

Stood well (1.0) Rocked other

Sunday Monday

D Richards

6/1 12:00 0 4.0 84.5 84.5 84.5 85 84 84.7 85 83 84.5 Temp

12:01 4 4.0 127 126.5 126.5 126.5 126.5 126.5 126 127 122 122.5 123 123

.04 8 " 122 121 121.5 122 122 122.5 122.5 125 121 120.2 120.5 120.5

.08 12 " 121 120 120.5 121 121 122 122.5 121.7 122 119.5 119.7 119.7

.12 16 " 119.5 117 118.5 120 120 121 120 119.5 121 116.2 116.5 116.5

.16 20 " 118 116 117 119 119 119.5 118.5 118.5 119 117 117 117 117.5

.20 24 " 116.2 114.5 115.5 117.5 117.5 118 117 117.5 117.5 115.5 115.5 115.5

.24 28 " 114.5 113 114 116 116 116.5 115 115.5 116 113.5 114 114 114

.28 32 " 113 111.5 112.5 114.5 114.5 115 113.5 114 114.5 111.5 112.5 112.5

.32 36 " 111.5 110 111 113 113 113.5 112 112.5 113 110 111 111 111

.36 40 " 110 108.5 109.5 111.5 111.5 112 110.5 111 111.5 108.5 109.5 109.5 109.5

.40 44 " 108.5 107 108 110 110 110.5 109 109.5 110 107 108 108 108

.44 48 " 107 105.5 106.5 108.5 108.5 109 107.5 108 108.5 105.5 106.5 106.5 106.5

.48 52 " 105.5 104 105 107 107 107.5 106 106.5 107 104 105 105 105

.52 56 " 104 102.5 103.5 105.5 105.5 106 104.5 105 105.5 102.5 103.5 103.5 103.5

.56 60 " 102.5 101 102 104 104 104.5 103 103.5 104 101 102 102 102

1.00 64 " 101 99.5 100.5 102.5 102.5 103 101.5 102 102.5 99.5 100.5 100.5 100.5

1.04 68 " 99.5 98 99 101 101 101.5 100 100.5 101 98 99 99 99

1.08 72 " 98 96.5 97.5 99.5 99.5 100 98.5 99 99.5 96.5 97.5 97.5 97.5

1.12 76 " 96.5 95 96 98 98 98.5 97 97.5 98 95 96 96 96

1.16 80 " 95 93.5 94.5 96.5 96.5 97 95.5 96 96.5 93.5 94.5 94.5 94.5

1.20 84 " 93.5 92 93 95 95 95.5 94 94.5 95 92 93 93 93

1.24 88 " 92 90.5 91.5 93.5 93.5 94 92.5 93 93.5 90.5 91.5 91.5 91.5

1.28 92 " 90.5 89 90 92 92 92.5 91 91.5 92 89 90 90 90

1.32 96 " 89 87.5 88.5 90.5 90.5 91 89.5 90 90.5 87.5 88.5 88.5 88.5

1.36 100 " 87.5 86 87 89 89 89.5 88 88.5 89 86 87 87 87

1.40 104 " 86 84.5 85.5 87.5 87.5 88 86.5 87 87.5 84.5 85.5 85.5 85.5

1.44 108 " 84.5 83 84 86 86 86.5 85 85.5 86 83 84 84 84

1.48 112 " 83 81.5 82.5 84.5 84.5 85 83.5 84 84.5 81.5 82.5 82.5 82.5

1.52 116 " 81.5 80 81 83 83 83.5 82 82.5 83 80 81 81 81

1.56 120 " 80 78.5 79.5 81.5 81.5 82 80.5 81 81.5 78.5 79.5 79.5 79.5

1.60 124 " 78.5 77 78 80 80 80.5 79 79.5 80 77 78 78 78

1.64 128 " 77 75.5 76.5 78.5 78.5 79 77.5 78 78.5 75.5 76.5 76.5 76.5

1.68 132 " 75.5 74 75 77 77 77.5 76 76.5 77 74 75 75 75

1.72 136 " 74 72.5 73.5 75.5 75.5 76 74.5 75 75.5 72.5 73.5 73.5 73.5

1.76 140 " 72.5 71 72 74 74 74.5 73 73.5 74 71 72 72 72

1.80 144 " 71 69.5 70.5 72.5 72.5 73 71.5 72 72.5 69.5 70.5 70.5 70.5

1.84 148 " 69.5 68 69 71 71 71.5 70 70.5 71 68 69 69 69

1.88 152 " 68 66.5 67.5 69.5 69.5 70 68.5 69 69.5 66.5 67.5 67.5 67.5

1.92 156 " 66.5 65 66 68 68 68.5 67 67.5 68 65 66 66 66

1.96 160 " 65 63.5 64.5 66.5 66.5 67 65.5 66 66.5 63.5 64.5 64.5 64.5

2.00 164 " 63.5 62 63 65 65 65.5 64 64.5 65 62 63 63 63

2.04 168 " 62 60.5 61.5 63.5 63.5 64 62.5 63 63.5 60.5 61.5 61.5 61.5

2.08 172 " 60.5 59 60 62 62 62.5 61 61.5 62 59 60 60 60

2.12 176 " 59 57.5 58.5 60.5 60.5 61 59.5 60 60.5 57.5 58.5 58.5 58.5

2.16 180 " 57.5 56 57 59 59 59.5 58 58.5 59 56 57 57 57

2.20 184 " 56 54.5 55.5 57.5 57.5 58 56.5 57 57.5 54.5 55.5 55.5 55.5

2.24 188 " 54.5 53 54 56 56 56.5 55 55.5 56 53 54 54 54

2.28 192 " 53 51.5 52.5 54.5 54.5 55 53.5 54 54.5 51.5 52.5 52.5 52.5

2.32 196 " 51.5 50 51 53 53 53.5 52 52.5 53 50 51 51 51

2.36 200 " 50 48.5 49.5 51.5 51.5 52 50.5 51 51.5 48.5 49.5 49.5 49.5

2.40 204 " 48.5 47 48 50 50 50.5 49 49.5 50 47 48 48 48

2.44 208 " 47 45.5 46.5 48.5 48.5 49 47.5 48 48.5 45.5 46.5 46.5 46.5

2.48 212 " 45.5 44 45 47 47 47.5 46 46.5 47 44 45 45 45

2.52 216 " 44 42.5 43.5 45.5 45.5 46 44.5 45 45.5 42.5 43.5 43.5 43.5

2.56 220 " 42.5 41 42 44 44 44.5 43 43.5 44 41 42 42 42

2.60 224 " 41 39.5 40.5 42.5 42.5 43 41.5 42 42.5 39.5 40.5 40.5 40.5

2.64 228 " 39.5 38 39 41 41 41.5 40 40.5 41 38 39 39 39

2.68 232 " 38 36.5 37.5 39.5 39.5 40 38.5 39 39.5 36.5 37.5 37.5 37.5

2.72 236 " 36.5 35 36 38 38 38.5 37 37.5 38 35 36 36 36

2.76 240 " 35 33.5 34.5 36.5 36.5 37 35.5 36 36.5 33.5 34.5 34.5 34.5

2.80 244 " 33.5 32 33 35 35 35.5 34 34.5 35 32 33 33 33

2.84 248 " 32 30.5 31.5 33.5 33.5 34 32.5 33 33.5 30.5 31.5 31.5 31.5

2.88 252 " 30.5 29 30 32 32 32.5 31 31.5 32 29 30 30 30

2.92 256 " 29 27.5 28.5 30.5 30.5 31 29.5 30 30.5 27.5 28.5 28.5 28.5

2.96 260 " 27.5 26 27 29 29 29.5 28 28.5 29 26 27 27 27

3.00 264 " 26 24.5 25.5 27.5 27.5 28 26.5 27 27.5 24.5 25.5 25.5 25.5

3.04 268 " 24.5 23 24 26 26 26.5 25 25.5 26 23 24 24 24

3.08 272 " 23 21.5 22.5 24.5 24.5 25 23.5 24 24.5 21.5 22.5 22.5 22.5

3.12 276 " 21.5 20 21 23 23 23.5 22 22.5 23 20 21 21 21

3.16 280 " 20 18.5 19.5 21.5 21.5 22 20.5 21 21.5 18.5 19.5 19.5 19.5

3.20 284 " 18.5 17 18 20 20 20.5 19 19.5 20 17 18 18 18

3.24 288 " 17 15.5 16.5 18.5 18.5 19 17.5 18 18.5 15.5 16.5 16.5 16.5

3.28 292 " 15.5 14 15 17 17 17.5 16 16.5 17 14 15 15 15

3.32 296 " 14 12.5 13.5 15.5 15.5 16 14.5 15 15.5 12.5 13.5 13.5 13.5

3.36 300 " 12.5 11 12 14 14 14.5 13 13.5 14 11 12 12 12

3.40 304 " 11 9.5 10.5 12.5 12.5 13 11.5 12 12.5 9.5 10.5 10.5 10.5

3.44 308 " 9.5 8 9 11 11 11.5 10 10.5 11 8 9 9 9

3.48 312 " 8 6.5 7.5 9.5 9.5 10 8.5 9 9.5 6.5 7.5 7.5 7.5

3.52 316 " 6.5 5 6 8 8 8.5 7 7.5 8 5 6 6 6

3.56 320 " 5 3.5 4.5 6.5 6.5 7 5.5 6 6.5 3.5 4.5 4.5 4.5

3.60 324 " 3.5 2 3 5 5 5.5 4 4.5 5 2 3 3 3

3.64 328 " 2 0.5 1.5 3.5 3.5 4 2.5 3 3.5 0.5 1.5 1.5 1.5

3.68 332 " 0.5 -1 0 2 2 2.5 1 1.5 2 -1 0 0 0

3.72 336 " -1 -2.5 -1.5 0.5 0.5 1 -0.5 0 0.5 -2.5 -1.5 -1.5 -1.5

3.76 340 " -2.5 -4 -3 -1 -1 -0.5 -2 -1.5 -1 -4 -3 -3 -3

3.80 344 " -4 -5.5 -4.5 -2.5 -2.5 -2 -3.5 -3 -2.5 -5.5 -4.5 -4.5 -4.5

3.84 348 " -5.5 -7 -6 -4 -4 -3.5 -5 -4.5 -4

DATE	TIME			470	472	474	476	478	479	480	482	484	486	488	490	
6/11/7	3:27	21½	90													
	37	21½	"													
	47	21½	"	111	117	21	86.5	87	94	92.5						
						20			53							
					80											
						✓		✓								
				84.5			73		88		100	50	50		50	
						✓		✓				✓	✓		✓	
									55							
									50		95					
									✓							
	4:00	24½	"	80					78.4		85	87				
	4:22	24½	"	109	113	114	114	114	113		109	111	116	117	118	120
				50					50							
									✓			80				
									113		113	112				
											✓	✓				

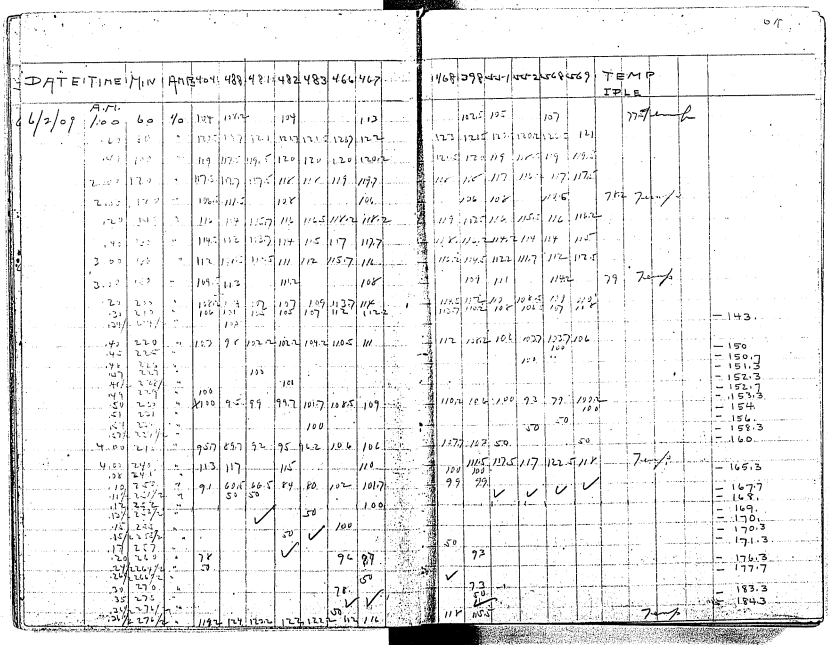
- 143.
- 144.7
- 146.7
- 151.
- 152.
- 153.7
- 153.
- 156.7
- 166.7 Temp
- 168.3
- 166.3
- 172.3 Temp

Cells 477 – 480 removed from [illegible] of 4 thermal tests.
Cells 465 – 468 Split in Edmonds Section again, for 50 runs.

6/12	6:45	24½	90	117	90	(116)		(115.5)			117	200	(113)	(113)		
	4:55	20	"	116	117		115.2		83.2			112.2	110.5	113	79.5	Temp
	5:55	60	"	110.5	116		114		84.7			106	106	107.5	72	"
	6:55	120	"	107.7	111.7		110.5		82.2			103.2	103.5	105	74	"
	7:55	180	"	105	109.5		108		82			100.5	101	107.7	78.2	"
	8:55	240	"	103.2	107		103.2		90.2			99	99.7	102.5	78.5	"
	9:55	300	"	102	105.5		102		92.7			98.6	99.5	102.2	78	"
	10:55	360	"	101.5	104.7		101		95			99	100	102.2	80.5	"
	11:55	420	"	102.5	105.2		102		97.5			100.2	104.5	102.5	81	"
	12:55	480	"	103.2	104.2	103.2	103.2	103	103		103.2	103	103.7	103.5	103.7	

DATE	TIME	MIN	AMPS	404	488	491	482	483	466	467	468	398	551	552	548	569	TEMP. Idea
							Discharge										
6/1/09	12:00 PM	0	40	144	143	142	142	140	142	142	141	141	138	137	137	137	
	:04	4	"	133	133	133	132	132	133	133	133	135	132	131	133	133	
	:10	10	"	131	131	131	130	130	130	130	131	132	130	130	130	130	
	:20	20	"	128	128	128	128	128	129	129	128	129	127	127	127	127	
	:40	40	"	126	126	126	125	125	126	126	126	126	124	124	124	124	
	1:00	60	"	122	122	122	122	122	122	122	122	122	121	121	121	122	
	1:00	"	"	106	106		106			106		106	107	106			83 Temp
	1:20	80	"	120	118	120	118	120	120	120	122	120	120	119	120	120	
	1:40	100	"	118	117	115	115	117	120	120	119	119	115	115	119	118	
	2:00	120	"	117	117	116	118	118	118	117	120	118	114	114	118	117	
	2:00	"	"	108	108		111			107		108	111		112		83.2
	2:20	140	"	116	118	116	116	116	118	118	117	117	115	117	115	116	
	2:40	160	"	118	118	116	118	118	117	117	117	117	117	117	117	117	
	3:00	180	"	112	108	110	110	112	112	112	116	113	117	116	112	116	
	3:00	"	"	112	111		110			113		112	113		113		84.5 Temp
	3:20	200	"	106	103	106	106	107	113	113	114	107	109	107	108	108	150
	3:40	220	"	102	100	101	101	102	104	104	102	103	99	100	100	102	149.7
	4:00	240	"	98	98	98	98	98	98	98	98	98	96	96	96	96	149.3
	4:20	260	"	96	96	96	96	96	96	96	96	96	94	94	94	94	149.3
	4:40	280	"	94	94	94	94	94	94	94	94	94	92	92	92	92	149.3
	5:00	300	"	92	92	92	92	92	92	92	92	92	90	90	90	90	149.3
	5:20	320	"	90	90	90	90	90	90	90	90	90	88	88	88	88	149.3
	5:40	340	"	88	88	88	88	88	88	88	88	88	86	86	86	86	149.3
	6:00	360	"	86	86	86	86	86	86	86	86	86	84	84	84	84	149.3
	6:20	380	"	84	84	84	84	84	84	84	84	84	82	82	82	82	149.3
	6:40	400	"	82	82	82	82	82	82	82	82	82	80	80	80	80	149.3
	7:00	420	"	80	80	80	80	80	80	80	80	80	78	78	78	78	149.3
	7:20	440	"	78	78	78	78	78	78	78	78	78	76	76	76	76	149.3
	7:40	460	"	76	76	76	76	76	76	76	76	76	74	74	74	74	149.3
	8:00	480	"	74	74	74	74	74	74	74	74	74	72	72	72	72	149.3
	8:20	500	"	72	72	72	72	72	72	72	72	72	70	70	70	70	149.3
	8:40	520	"	70	70	70	70	70	70	70	70	70	68	68	68	68	149.3
	9:00	540	"	68	68	68	68	68	68	68	68	68	66	66	66	66	149.3
	9:20	560	"	66	66	66	66	66	66	66	66	66	64	64	64	64	149.3
	9:40	580	"	64	64	64	64	64	64	64	64	64	62	62	62	62	149.3
	10:00	600	"	62	62	62	62	62	62	62	62	62	60	60	60	60	149.3
	10:20	620	"	60	60	60	60	60	60	60	60	60	58	58	58	58	149.3
	10:40	640	"	58	58	58	58	58	58	58	58	58	56	56	56	56	149.3
	11:00	660	"	56	56	56	56	56	56	56	56	56	54	54	54	54	149.3
	11:20	680	"	54	54	54	54	54	54	54	54	54	52	52	52	52	149.3
	11:40	700	"	52	52	52	52	52	52	52	52	52	50	50	50	50	149.3
	12:00	720	"	50	50	50	50	50	50	50	50	50	48	48	48	48	149.3
	12:20	740	"	48	48	48	48	48	48	48	48	48	46	46	46	46	149.3
	12:40	760	"	46	46	46	46	46	46	46	46	46	44	44	44	44	149.3
	13:00	780	"	44	44	44	44	44	44	44	44	44	42	42	42	42	149.3
	13:20	800	"	42	42	42	42	42	42	42	42	42	40	40	40	40	149.3
	13:40	820	"	40	40	40	40	40	40	40	40	40	38	38	38	38	149.3
	14:00	840	"	38	38	38	38	38	38	38	38	38	36	36	36	36	149.3
	14:20	860	"	36	36	36	36	36	36	36	36	36	34	34	34	34	149.3
	14:40	880	"	34	34	34	34	34	34	34	34	34	32	32	32	32	149.3
	15:00	900	"	32	32	32	32	32	32	32	32	32	30	30	30	30	149.3
	15:20	920	"	30	30	30	30	30	30	30	30	30	28	28	28	28	149.3
	15:40	940	"	28	28	28	28	28	28	28	28	28	26	26	26	26	149.3
	16:00	960	"	26	26	26	26	26	26	26	26	26	24	24	24	24	149.3
	16:20	980	"	24	24	24	24	24	24	24	24	24	22	22	22	22	149.3
	16:40	1000	"	22	22	22	22	22	22	22	22	22	20	20	20	20	149.3
	17:00	1020	"	20	20	20	20	20	20	20	20	20	18	18	18	18	149.3
	17:20	1040	"	18	18	18	18	18	18	18	18	18	16	16	16	16	149.3
	17:40	1060	"	16	16	16	16	16	16	16	16	16	14	14	14	14	149.3
	18:00	1080	"	14	14	14	14	14	14	14	14	14	12	12	12	12	149.3
	18:20	1100	"	12	12	12	12	12	12	12	12	12	10	10	10	10	149.3
	18:40	1120	"	10	10	10	10	10	10	10	10	10	8	8	8	8	149.3
	19:00	1140	"	8	8	8	8	8	8	8	8	8	6	6	6	6	149.3
	19:20	1160	"	6	6	6	6	6	6	6	6	6	4	4	4	4	149.3
	19:40	1180	"	4	4	4	4	4	4	4	4	4	2	2	2	2	149.3
	20:00	1200	"	2	2	2	2	2	2	2	2	2	0	0	0	0	149.3

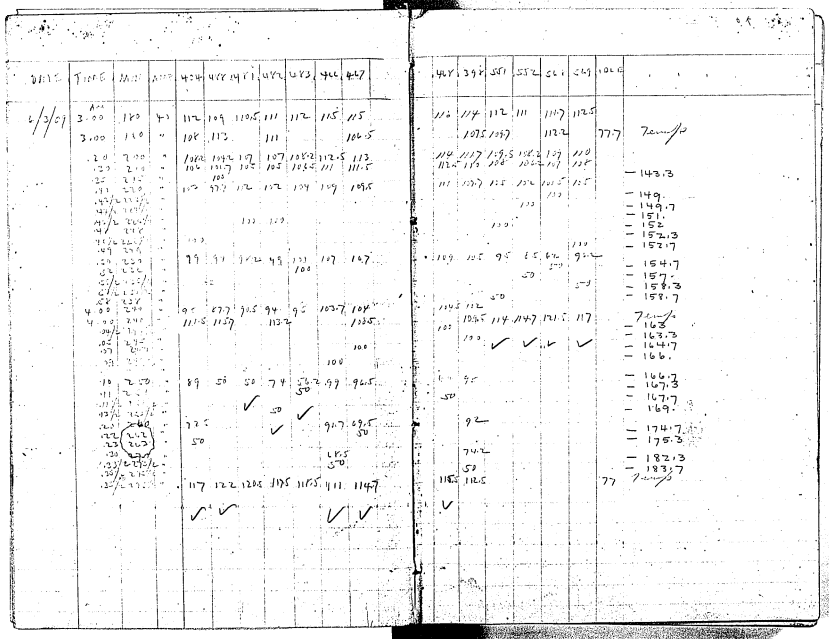
DATE	TIME	MIN	AMP	484	488	481	482	483	466	467	468	398	464	442	476	469	TEMP
	AM.																IDLE
	1:09	249								1.00							
6/11/09	:11	247	40														166.
	:11½	245½	"														167.3
																	169.7
	:14	255	"														
	:18	246	"	46.9													
	21½	236½	"	40													172
	26	226	"														174.3
	30	220	"														177.7
																	180.
6/11/09	Change			138	91	109			164		118	101	134		134		
	AM.																
	:14	6	30	137	127	132			119			120	121		122	103.7	Tank
	:20	6	"	130	124	122			113			114	114.7		114.7	82	"
	:26	6	"	122	117	111.2			107			107.7	108.7		112.2	102	"
	:30	4	"	108	102	107			103.5			103.7	104.7		108	79	"
	8:45	24	"	102	107	104			100.7			101.7	102		106.5	78.2	"
	9:00	30	"	103.5	107.2	102			100			99.7	101		104.2	78	"
	10:00	36	"	104.7	104.7	100.2			98.7			99	100		104	76.5	"
	11:00	120	"	100.7	104.7	99.5			97.5			97.5	100.2		103	76	"
	1:00	120	"	173	176.5	173.7	174.5	175	177.7	177		175.5	176	177.7	177	177	P.D. READING
	Discharge																
	AM.																
	1:00	0	40	145	143	142	141	141	142.5	142		142	143	139.5	139	139	138.2
	:04	4	"	133	133	132.5	132.5	132.5	133			133	134.5	132	132	132.5	132
	:10	10	"	132.5	131	131	131	131	132	132.5		131	132.5	130.2	130	130.2	131
	:20	20	"	129	128.5	128.2	128.5	128.5	129.5	129		129	131	127.5	127	127.5	128.2
	:40	45	"	125	124.7	125	125	125	126.5	125		125.7	126	124.5	124.2	124.5	125
6/11/09	1:00	60	"	120	121.7	122.5	123	123	123.5	123		124	123.7	122.2	122.5	122.5	123

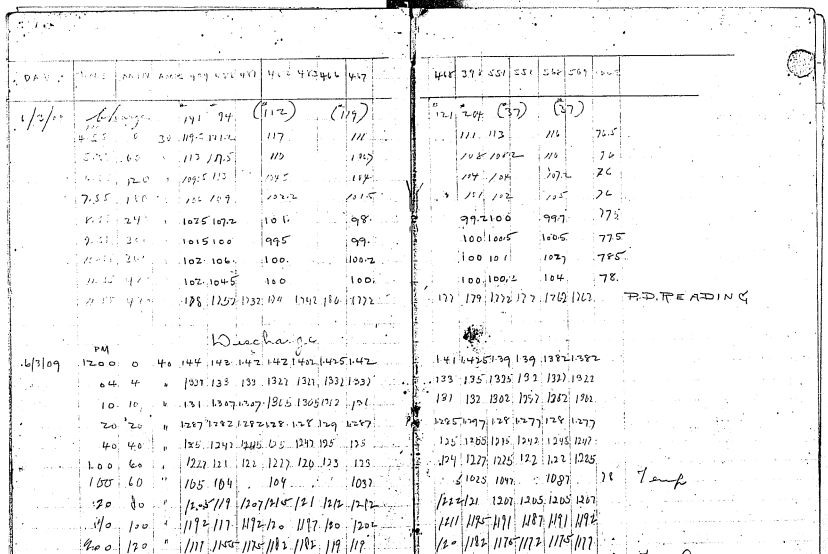

DATE
TIME
MIN
TEMP
IDLE
6/2/09
A.M.
1:00
60
143.
150
150.7
151.3
152.3
152.7
153.3
154
156.
158.3
160.
165.3
167.7
168.
169.
170.
170.3
171.3
176.3
177.7
183.3
184.3

DATE	Time	Min	Amps	426	428	429	412	413	414	417	419	434	435	423	409	1046	
6/7/09	4:55		Charge	139	92	(110)				(117 +	119	Time	(95.5)	(112.5)	(96)	767	Temp
	5:55	20		121	117	126.7				122	117		119.5	119.5	122.5	79.5	"
	6:55	60	"	116	122					114.7	111.2		111	113	115	79.5	"
	7:55	120	"	110.7	116.5					109	106.2		107	107	110.5	79.5	"
	8:55	180	"	106.5	111.2					105	101.7		102.5	103	107	77.7	"
	9:55	240	"	102.5	107.5					101	97.5		97.5	99.7	102.5	75	"
	10:55	300	"	98.5	103.7					98.5	94		94	95.5	101	75.6	"
	11:55	360	"	94	99.5					94	90		91.5	92.2	91	74	"
	12:55	420	"	91.2	91					95.2	87		94	94	98	68.5	"
	1:55	480	"	179	177.2	174.2	125	125.7	181	178.4	177	180	178.5	178.2	177	177.2	VOLT READING
						Discharge											
6/2/09	PM 12:00	0	40	146.2	144	143	142.2	142.2	143.2	143.4		143	142	140	139.7	139	139		
	:04	4	"	133.5	133	133	133	132.7	133.7	133.5		133	133.5	132.2	132.2	132.7	133		
	:10	10	"	131	131.7	130.5	130.5	130.5	131	130		130.7	132	130	129.7	130.5	130.5		
	:20	20	"	128.7	128.2	128	128.2	128.2	128.9	128.5		128.2	129.7	127.7	127	127.5	128.		
	:40	40	"	125.2	124.7	124.5	124.5	124.5	125.2	124.9		126.2	126	124.5	124.2	124.5	124.5		
	1:00	60	"	123.7	123.2	122.5	122.7	122.7	123	122.7		123.2	123.7	123	122.7	122.2	122.5		
	1:00	60	"	99.2	101.5		99.7			99.5			98	98		97.	96.5	Tank	
	:20	80	"	120	119	120.7	121	121	121.2	121		122	120.7	120.2	120	120.2	120.5		
	:40	100	"	118.2	117	117.2	118.5	119.5	117.7	120		121	119.2	118.2	118.7	118.7	119.2		
	2:00	120	"	117	116.2	117.2	117.7	117.7	118.7	118.7		117.7	118	117	116.7	117	117.5		
	2:00	"	"	101.2	101.5		103.2			100.			101.2	103.2		102.7	74.7	Tank	
	:20	140	"	115.7	113.2	115.5	115.5	116.7	116.7	117.2		118.2	116.7	115.5	114.7	115.5	115.7		
	:40	160	"	113.7	110.5	112.5	113.2	113.7	113.7	114.5		114.7	113.5	112.7	112.5	113.5	114		

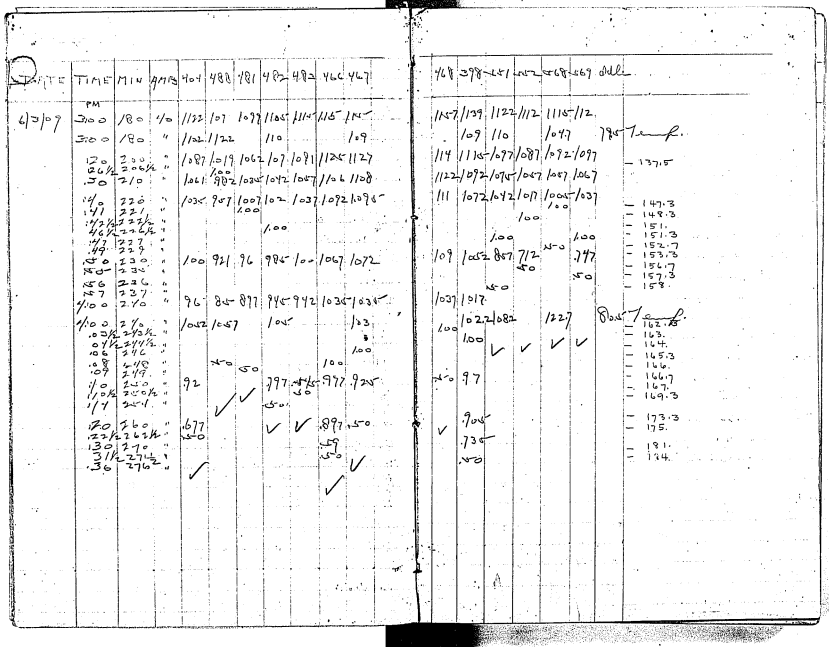
DATE	TIME	MIN	AMTS	404	488	491	492	493	466	467	468	398	551	552	548	567	TEMP Added	
6/2/09	PM																	
	3:00	180	90	1112	1074	110	110	111	1147	1147	1147	1137	1117	1107	1115	1119		
	3:00	180	"	1032	1084		106		1022			1047	1045		1082		747	Temp.
	1:00	170	"		1047													
	12:00	200	"	1077	1022	104	1087	1077	1127	1122		1137	1107	1087	1075	1087		— 137.7
	12:00	200	"		1.00													
	11:30	210	"	1047	1084	1032	1037	1027	1102	1105		1127	1097	1077	1082	1067		
	11:00	220	"	1007	987	1002	1001	1021	1084	1087		1067	1067	1042	1012	1017	1047	
	11:00	220	"			1.00	1.00							1.00	1.00			— 147.7
	11:00	220	"															— 148.3
	10:30	220	"	1.00				1.00										— 151.3
	10:00	220	"											1.00			1.00	— 152.
	9:30	220	"															— 152.3
	9:00	220	"	772	927	947	947	984	1006	1066		1087	1047	947	847	537	937	
	8:30	220	"													.50		— 155.
	8:00	220	"											.50			.50	— 157.7
	7:30	220	"															— 159.7
	7:00	220	"															— 159.
	6:30	220	"															
	6:00	220	"	730	862	881	92	922	1027	1032		1047	1007					
	5:30	220	"															
	5:00	220	"	1087	1124		111			1067		1037	1007					
	4:30	220	"															
	4:00	220	"															
	3:30	220	"															
	3:00	220	"															
	2:30	220	"															
	2:00	220	"															
	1:30	220	"															
	1:00	220	"															
	12:30	220	"															
	12:00	220	"															
	11:30	220	"															
	11:00	220	"															
	10:30	220	"															
	10:00	220	"															
	9:30	220	"															
	9:00	220	"															
	8:30	220	"															
	8:00	220	"															
	7:30	220	"															
	7:00	220	"															
	6:30	220	"															
	6:00	220	"															
	5:30	220	"															
	5:00	220	"									

DATE	TIME	MIN	AMB	404	489	481	482	483	460	467	468	378	447	448	256	458	469	TEMP IDLE
6/2/09	PM	charge		170	92	111			(8)		120	202	(3.6)		(3.6)			
		6	30	1112	1145	102			1085		1087	109			117			767
		60	"	1155	1197	113			109		110	110			113			772
		120	"	1107	1162	107			1067		1062	1072			1097			78
		180	"	1032	113	107			1045		1042	1052			108			784
		240	"	1085	1094	104			1025		102	103			1057			787
		300	"	1037	1082	1032			1012		1017	102			1045			79
		360	"	1025	1072	102			102		1007	1042			1052			787
		420	"	1037	1062	103			102		102	1027			1037			79
		480	"	1772	1747	1772	1727	1727	1729	1762	1756	1762	1717	1747	1747	1747	1747	END READING
6/3/09	AM	Discharge																
	12:00	0	40	1142	1162	1372	139	139	1375	139	137	1385	136	1365	1352	1352		
	.04	4	"	134	1327	1335	1335	132	1347	1325	1327	1347	1327	1327	1327	1322		
	.10	10	"	131	131	1305	1305	1337	1345	1305	131	1325	1302	1302	1302	1302		
	.20	20	"	1265	124	124	124	124	129	1265	1262	133	1277	1277	127	127		
	.40	40	"	1265	124	1245	1255	125	126	1287	126	126	1247	1247	1225	125		
	1.00	60	"	1205	1219	1225	123	123	1235	1235	134	1265	1222	1222	1222	1222		
	1.00	60	"	1665	119		1055		1467		1395	106		109		762 Temps		
	.20	80	"	1205	1165	121	1215	121	1245		1192	121	1202	120	1202	121		
	.40	100	"	119	1175	119	120	120	120		121	1237	122	122	1187	119		
	2.00	120	"	1177	116	1177	118	1182	119		120	1185	1175	117	1175	118		
	2.00	120	"	1675	111		1045		106			105	108		111		Temps	
	.20	140	"	116	1147	1157	116	1167	118		119	1167	1147	1147	1147	1147		
	.40	160	"	1147	112	1126	114	1147	1145		1177	116	114	1137	1147	1145		



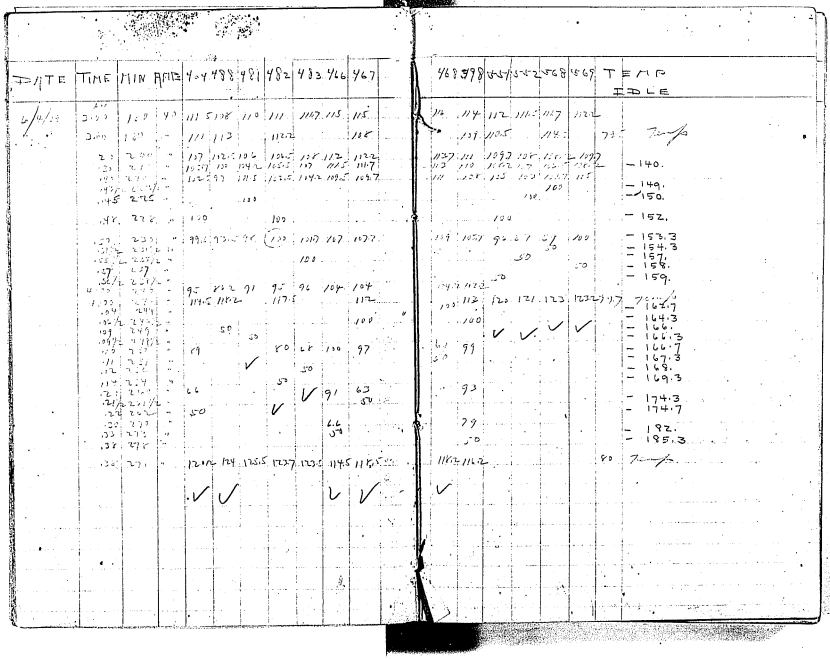


| DATE | TIME | MIN | MAX | | |



DATE	TIME	MIN	AMB	404	480	481	483	482	466	467	468	398	481	482	668	669	dilli	
	PM																	
6/30/07	3:00	/80	1/0	/122	/07	1078	/106	/114	/115	/14	/127	/139	/122	/112	/115	/12		
	3:30	/80	"	/102	/22		/10			/09		/09	/10		/047	785	Temp.	
	12	2:30	"	/087	/019	/062	/07	/091	/125	/127		/14	/116	/077	/087	/072	/097	— 137.5
	26½	2:06½	"		100													
	30	2:10	"	/061	982	/024	/042	/047	/106	/108		/122	/092	/076	/067	/067	/067	
	40	2:20	"	/036	967	/007	/02	/037	/092	/098		/11	/072	/042	/01	/004	/037	— 147.3
	41	2:21	"			100									100			— 148.3
	42½	2:22½	"				100											— 151.
	46½	2:26½	"											100		100		— 151.3
	47	2:27	"												50			— 152.7
	49	2:29	"															— 153.3
	50	2:30	"	/100	921	96	985	/00	/067	/072		/09	/052	867	712	50	797	— 156.7
	50	2:30	"															— 157.3
	56	2:36	"															— 158.
	57	2:37	"															
	1:00	2:40	"	96	85	877	945	992	1036	1038		/037	/017					
	1:00	2:40	"	/082	/057		/04			/23		/00	/027	/082		/227	805	Temp.
		2:42½	"															— 162.5
		2:43½	"										/00					— 163.
		2:47½	"											✓	✓	✓	✓	— 164.
		2:48	"							/00								— 165.3
		2:48	"		50	50												— 166.
		2:48	"															— 166.7
	1:10	2:50	"	/92			797	945	977	925		50	97					— 167.
	1:10½	2:50½	"		✓	✓		50										— 169.3
	1:14	2:54	"															
		2:55	"															— 173.3
	20	2:60	"	/677				✓	✓	/897	50	✓	/904					— 175.
	22½	2:62½	"	50									/73					
	30	2:70	"							59								— 181.
	31½	2:71½	"							50	✓		50					— 184.
	36	2:76	"		✓					✓								

DATE	TIME	MIN	AIR	404	408	381	482	383	466	467	468	398	441	552	569	469	Table Temp.
				172	95	93		120			122	204	(38)	(38)			
6/3/09	Charge P.M.																
	4:45	0	30	123	124		127			119		117	117		105	80	Tank
	5:45	60	"	119	122		118			114.5		112	112		111	85	"
	6:45	120	"	113	117		117			108		109	109		111	80	"
	7:45	180	"	108	114		111			105		106	104.5		109	80	"
	8:45	240	"	106	110		107			103		102	102.5		107	77	"
	9:45	300	"	104	107		104			101		102	102.5		105	77	"
	10:45	360	"	105	107		104			102		102	102.5		105	77	"
	11:45	420	"	104.5	106		104			102							
	11:45	420	"	177	175	172.5	173	173.5	168	177	171.5	169	172.5	173.5	175	169	P.D. TREATING
				Discharge													
6/4/09	A.M. 12:00	0	40	134	133	132	131	131	132	132	132	132	132.5	132.5	132.5	132	
	10	4	"	133	133	133	133	133	133	133	133	133	133.5	132.5	133	133	
	:10	10	"	131.5	131	131	131	131	132	131.5	131	133	132.5	131.5	131	131	
	:30	30	"	128	127.5	127	127	127	127.5	127.5	127	127	127	127.5	127	127	
	:40	40	"	125	124.5	124.5	125	125	125.5	125.5	125	126	125	125	125	125	
	1:00	60	"	122	121.5	121.5	122	123	123.5	123.5	123	125	122.5	122.5	122.5	123	
	1:00	60	"	107	105.5		110.5			104.5		105.5	106		110	79	Temp
	:30	90	"	121.5	119.5	121	121.5	121.5	121	121.5	122.5	121	121	121.5	121	121.5	
	:40	100	"	117.5	117.5	119	121	120	120	120.5	120	119.5	119	119	119	119.5	
	2:00	120	"	117.5	116	117.5	118.5	118.5	119	119	120	118.5	117.5	117.5	117.5	117	
	2:00	120	"	107	112.5		109			107.5		106.5	109		111	75	Temp
	:20	140	"	116	118	115.5	116.5	117	118	118	119	117.5	118.5	115.5	116	116.5	
	:40	160	"	114.5	116.5	113	114.5	115	117	117	117.5	116.5	115	114	115.5	115	



DATE	Time	MIN	SWAT	40ft	42ft	44ft	46ft	48ft	50ft	52ft	54ft	56ft	58ft	60ft	62ft	64ft	66ft	68ft	70ft	72ft	74ft	76ft	78ft	80ft	82ft	84ft	86ft	88ft	90ft	92ft	94ft	96ft	98ft	100ft	102ft	104ft	106ft	108ft	110ft	112ft	114ft	116ft	118ft	120ft	122ft	124ft	126ft	128ft	130ft	132ft	134ft	136ft	138ft	140ft	
6/4/09	4:55	0	30																																																							
	5:55	60	"																																																								
	6:55	120	"																																																							
	7:21	146	"																																																							
	6:55	240	"																																																							
	3:55	240	"																																																							
	12:55	240	"																																																							
	11:55	240	"																																																							
		PM																																																								
6/4/09	12:00	0	40	1494	1492	1492	1491	1492	1421	1421		1492	1493	1490	1493	1499	1493																																										
	:04	4	"	1334	1493	1493	1493	1493	1493	1493		1493	1493	1493	1493	1493	1493																																										
	:10	10	"	1311	1307	1307	1361	1307	1371	1371		1360	1332	1362	1359	1305	1307																																									
	:20	20	"	1293	1333	1332	1332	1326	1324	1334		1332	1295	1333	1333	1327	1331																																									
	:40	40	"	1215	1214	1215	1215	1215	1214	1357		1214	1214	1347	1295	1215	1214																																									
	1:00	60	"	1217	1207	1222	1224	1225	1227	1226		1227	1222	1224	1222	1225	1222																																									
	1:00	60	"	1032	1084		1052		1045					1032	1034		1022																																									
	:20	80	"	1191	1184	1204	1211	1207	1212	1212		1222	1205	1205	1205	1202	1205																																									
	:40	100	"	1163	1167	1192	1197	1197	1201	1201		1203	1193	1192	1192	1192	1192																																									
	2:00	120	"	1172	1182	1182	1182	1181	1182	1182		1182	1184	1184	1184	1184	1184																																									
	2:00	120	"	1145	1109		1107		1109					1165	1166		1168																																									
	2:20	140	"	1143	1132	1135	1158	1127	1177			1185	1177	1176	1185	1176	1172																																									
	2:40	160	"	1144	1111	1123	1130	1144	1147	1147		1148	1148	1144	1144	1144	1145																																									

Discharge

Temp

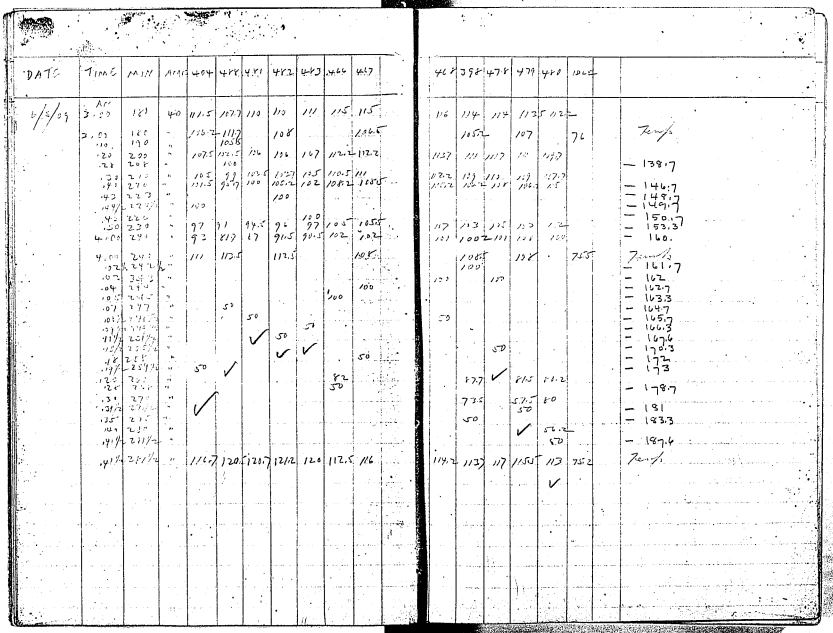
Temp

P.D

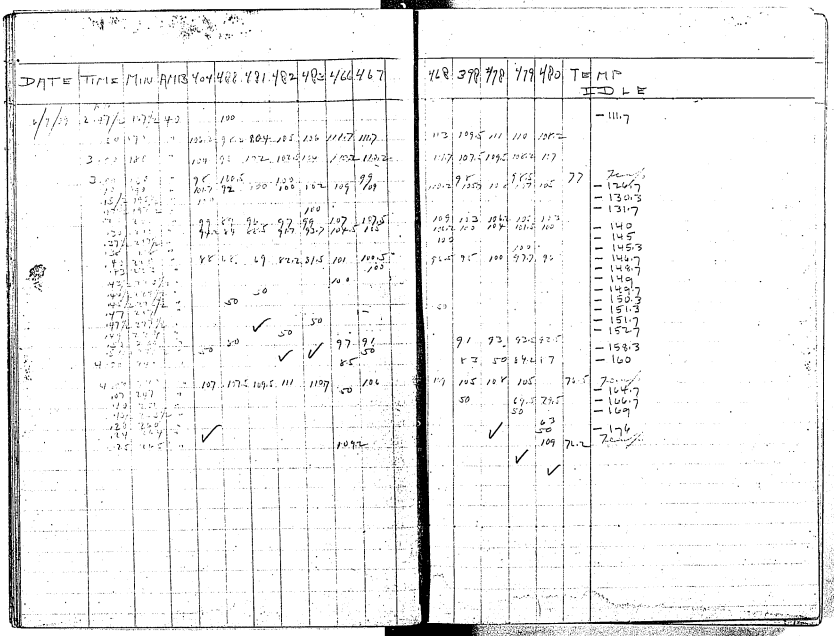
DATE	TIME	MIN AMPS	461	482	481	462	483	466	467	468	398	551	552	558	559	TEMP
																IDLE
4/4/09	PM 3:00	/80 40	1104	1064	1092	110	1107	1045	1145	1147	1137	1122	1112	1145	1122	
	3:00	/80 "	107	1084		110			1062		1071	1087		1132		777 Temp.
	:20	200 "	186	1085	1055	1066	1077	112	112	1157	111	110	108	109	1097	
	:24	200 "		100												— 136.
	:30	210 "	109	98	103	104	105	110	111	112	103	102	105	106	104	
	:40	220 "	1145	96	100	102	1025	985	1095	111	1032	1095	111	100	104	— 146.7
	1:45½	225½ "	100										100			— 149.7
	1:45	225 "				100										— 150.
	1:50	226 "												100		— 150.7
	1:50½	226½ "										100				— 151.
	1:55	227 "					100									— 151.3
	1:55½	227½ "											550			— 153.
	:50	230 "	966	914	942	972	932	1046	1067	1077	1037	847	645	77		— 155.7
	1:53½	233½ "											550			— 156.7
	1:56	236 "														— 157.3
	4:00	210 "	722	732	805	917	907	1045	1017	1007	1002					
	4:00	210 "	110	1145		1141			1077	100	1117	1117		1202		775 Temp.
	10:2½	212½ "														— 161.7
	10:3	213 "								100		✓	✓	✓	✓	— 162.
	10:3½	213½ "							100							— 162.3
	10:5	215 "						100								— 163.3
	10:5½	215½ "		550												— 163.7
	10:7½	217½ "			550											— 165.
	10:8½	218½ "														— 165.7
	10:9½	219½ "			✓		550			550						— 166.2
	11:0	220 "	842			622		96	905		97					
	11:1½	221½ "				550	✓		550							— 168.
	11:3½	223½ "														— 171.7
	11:8½	228½ "	550	✓												— 172.3
	:20	240 "				✓		81			882					Cells 478, 479, 480
	:27	247 "	✓					550			178.					
	:30	250 "									72					went connected in
	:35	255 "									550					1833
																Endurance Section
																after this discharge
																for 50. runs

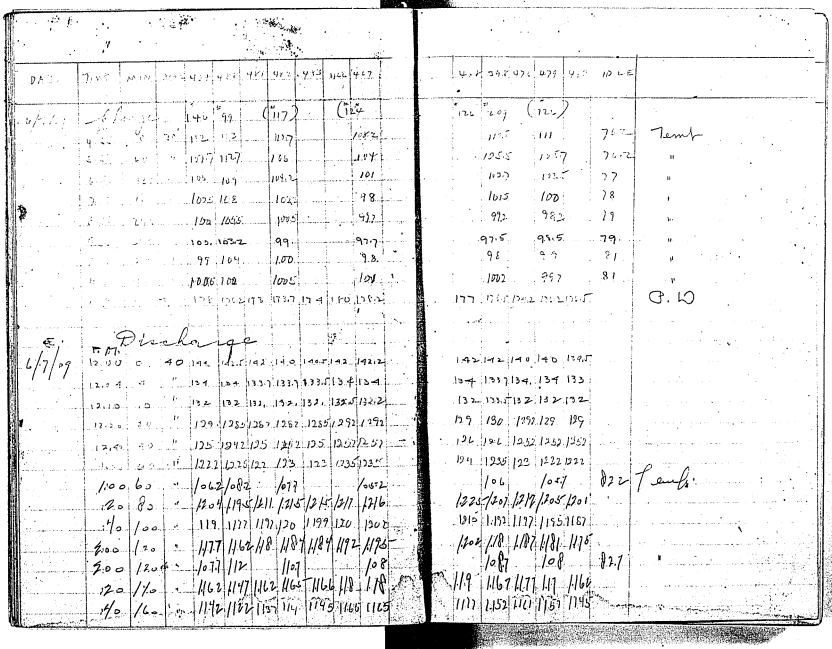
Cells 551, 552, 558, 559. were removed and connected up on testing board for overcharge tests... See 6/7/09 in individual record book.

DATE	TIME	MIN	AIR	404	488	491	482	483	466	461	468	398	478	479	480	TEMP IDLE
6/4/09	PM charge			144	97		1145			122	124	207	(124)			
	4:55	0	30	1205	1332		1177			116		1245	1205			77.2 Temp
	5:55	60	"	1067	1120		113			111		1085	1032			77.2 "
	6:55	120	"	1117	1157		1087			107		1047	102			77.5 "
	7:55	180	"	1082	102		1062			1025		103	101			77.7 "
	8:55	240	"	1062	1072		1032			1025		101	100			78 "
	9:55	300	"	1035	1067		1015			101		100	992			78 "
	10:55	360	"	1017	1067		101			1005		977	992			77.5 "
	11:55	420	"	1022	1047		101.5			1005		1005	992			
	11:55	420	"	1022	1057	1033	1033	1033	1015	1022	1775	1775	1775	1775	1775	T.D. TEADING
				Discharge												
6/5/09	A.M. 12:00	0	40	145	144	143	141.5	141.5	1435	1425		1435	1435	145	1435	137
	:05	1	"	1335	133	132	133	132	1325	1325		1325	1325	123	1325	1325
	:10	10	"	1305	131	131	131	131	1315	1315		131	133	131	1325	1325
	:20	20	"	1285	127	126	126	126	1265	1265		1285	130	1285	127	1265
	:40	40	"	125	1245	125	125	125	1255	1245		126	126	125	1235	1245
	1:00	60	"	1225	1215	1225	123	123	1235	1225		124	122	1225	1225	1215
	1:00	60	"	104	1085		104			104			1065		1065	77
	:20	80	"	1205	1195	121	1215	121.5	1215	1205		1225	1215	121	1205	1205
	:40	100	"	1185	117	119	1185	1185	1205	1185		121	1195	120	119	1185
	2:00	120	"	1135	1155	1175	117	119	119.5	1175		120	1185	119	117	117
	2:00	120	"	1055	109		107			1045			1045		1035	1045
	2:20	140	"	116	114	1155	116	116	117	116		119	117	1175	117	116
	2:40	160	"	114	111	113.5	114	1145	1145	114		1175	1155	116	115	1145

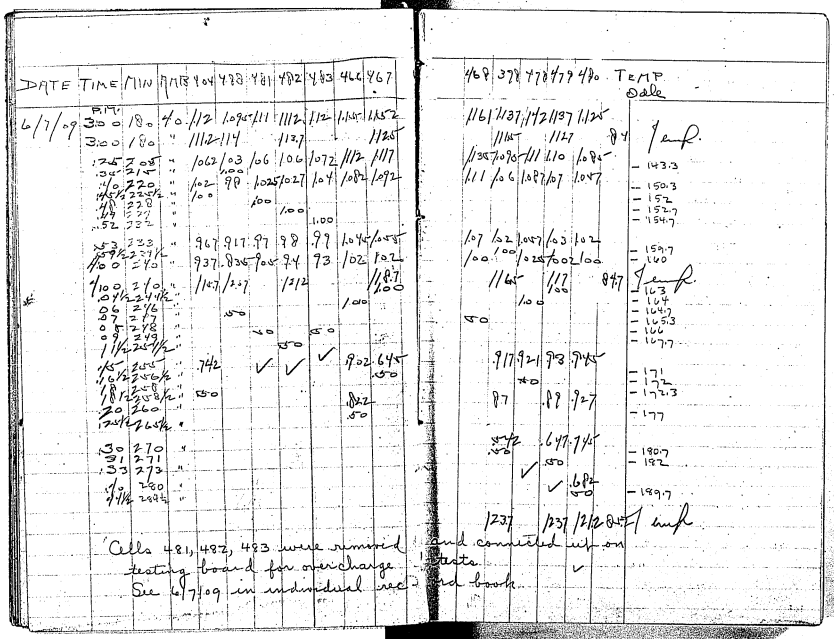


DATE	TIME/MIN	RATE	404	408	481	482	483	466	467	468	378	478	479	480	TEMP IDLE	
6/5/09	charge		145	98		(116)		(123)		125	108		(125)			
	4 AM		117	122		119			117		117		118.7		76.2	temp
	5 AM		117.7	117		114			116.7		112		113		76.5	"
	6 AM		112.5	116		109.5			106.2		108.5		107		75.5	"
	7 AM		103.5	111		105			102		104		102.5		75.5	"
	8 AM		103.2	109		102			99.2		99		99		76	"
	9 AM		101.2	104.7		99.7			97.5		98		99		76.2	"
	10 AM		100	103		97.7			97.2		96.2		97.7		76.7	"
	11 AM		99	101		95.5			96		96.5		98		76.5	"
	12 AM		102.2	105.7	103	103.7	107	105.5	105	107.2	107.2	106	105.7	107		TRADING
			Stood Thirty six hours over Sunday													
			Disc Large													
6/7/09	9 AM	0	110	123.5	102.5	104.7	107	107.2	107.2	107.2	107.2	107.2	107.2	107.2		
	1200		99.5	99.5		99.5			99.5		99.5		99.5		79	Temp
	1300	1	102.5	104.5	102.5	102.5	103	102.5	102.5	102.5	102.5	102.5	102.5	102.5		
	10	10	121	119.5	120	120.5	121	121.7	121.5	121.5	122.2	121.7	121	121		
	20	20	119.7	118	119.5	120	120.5	120.5	120.5	120.5	121	120.5	120	120		
	40	40	118.2	116	117	119.2	119.7	120	120	120	120	119.7	119	119		
	100	60	116	113.7	117	117.7	117.7	117	117.5	117.5	117	117	117	117.2		
	100	60	87	88.5		88			86.5			87.2	88.5		79	Temp
	120	80	115	113.5	116	116.5	115.5	117.5	116.7	116.5	116.2	117	116.2	116.7		
	140	100	114	110.5	114	116	115.5	116.5	116.5	115	115.5	116	115.7	116.5		
	200	120	112.5	108.2	111.7	112	113	113.7	113.7	112	114	112	112	113.7		
	200	120	97	96		99			96			97	96		79	Temp
	220	140	110.5	105	107	109.5	112.5	113	112	109.5	112	114	113.7	112		
	240	160	107	103.5	106	107	108	113	111.5	114	111	112	111.5	110		


DATE
TIME
MIN
A/113
479
480
481
482
483
484
485
486
487
488
489
478
479
480
TEMP
INDLE
111.7
130.3
131.7
140
145
145.3
146.7
148.7
149
149.7
150.3
151.3
151.7
152.7
158.3
160
164.7
166.7
169
176



E. Discharge
6/7/09



DATE | TIME | MIN | 481 | 482 | 483 | 484 | 485 | 486 | 487 | 488 | 489 | 490 | TEMP

6/7/09 | 3:00 | 180 | 40 | 112 | 1.095 | 111 | 1112 | 112 | 1.105 | 1.152 | 1161 | 1137 | 1172 | 1187 | 1.125 | Dale

3:00 | 180 | " | 1112 | 114 | | | 1137 | | | 1125 | 1167 | | 1127 | | | 84 | Temp.

:25 | 205 | " | 1062 | 103 | 106 | 106 | 1072 | 1112 | 1117 | 1.085 | 1.085 | 111 | 110 | 1084 | | — 143.3

:30 | 215 | " | 1.00 | | | | | | | | | | | | | —

:40 | 220 | " | 102 | 98 | 1.025 | 1027 | 104 | 1082 | 1092 | 111 | 106 | 1082 | 107 | 1047 | | — 150.3

:45 | 225 | " | 100 | | | | | | | | | | | | | — 152

:49 | 229 | " | | | 100 | | | | | | | | | | | — 152.7

:54 | 234 | " | | | | 100 | | | | | | | | | | — 154.7

:58 | 238 | " | | | | | 1.00 | | | | | | | | | —

1:03 | 243 | " | 967 | 917 | 97 | 98 | 97 | 1044 | 1058 | 107 | 102 | 1063 | 103 | 102 | | — 159.7

1:09 | 249 | " | 937 | 885 | 905 | 94 | 93 | 102 | 102 | 100 | 100 | 1025 | 102 | 100 | | — 160

1:00 | 240 | " | 1167 | 1217 | | 1212 | | | 1187 | 1165 | | 1100 | 1117 | 847 | Temp.

1:00 | 240 | " | | | | | | | 1100 | | | | | | | — 163

:04 | 244 | " | | | | | | | | | | | | | | — 164

:06 | 246 | " | | | 60 | | | | | | | | | | | — 164.7

:07 | 247 | " | | | | | | | | | | | | | | — 165.3

:08 | 248 | " | | | | 60 | 80 | | | | | | | | | — 166

:09 | 249 | " | | | | | | | | | | | | | | — 167.7

1:14 | 254 | " | | | | 60 | | | | | | | | | | —

:15 | 255 | " | 742 | | ✓ | ✓ | | ✓ | 902 | 645 | | 917 | 921 | 98 | 945 | — 171

:16 | 256 | " | | | | | | | 650 | | | 80 | | | | — 172

:18 | 258 | " | 650 | | | | | | | | | | | | | — 172.3

:20 | 260 | " | | | | | | | 882 | | | 87 | | 89 | 927 | —

1:24 | 264 | " | | | | | | | 850 | | | | | | | — 177

:30 | 270 | " | | | | | | | | | | | | | | —

:31 | 271 | " | | | | | | | | | | 8572 | 647 | 745 | | — 180.7

:33 | 273 | " | | | | | | | | | | 650 | | | | — 182

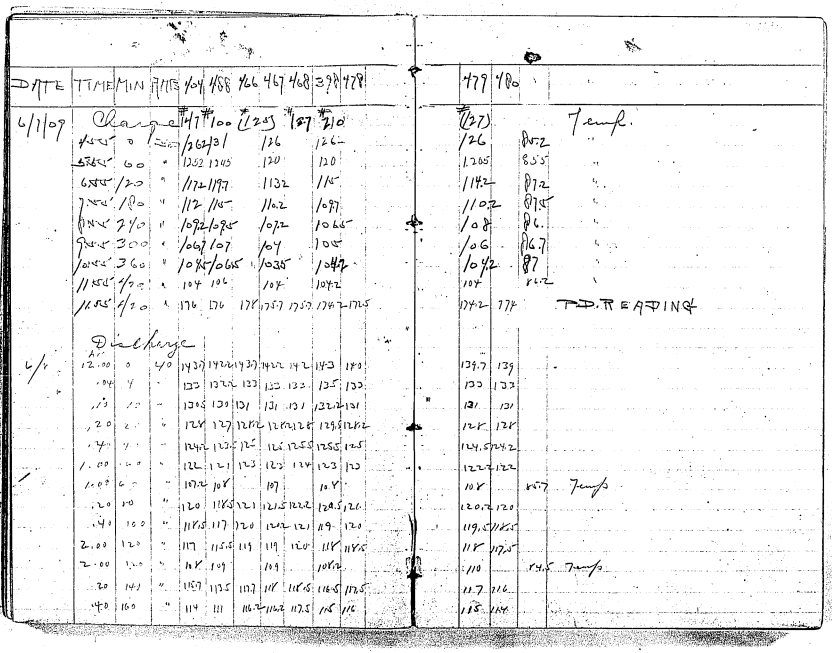
:40 | 280 | " | | | | | | | | | | | ✓ | 682 | | —

1:44 | 284 | " | | | | | | | | | | | | 650 | | — 189.7

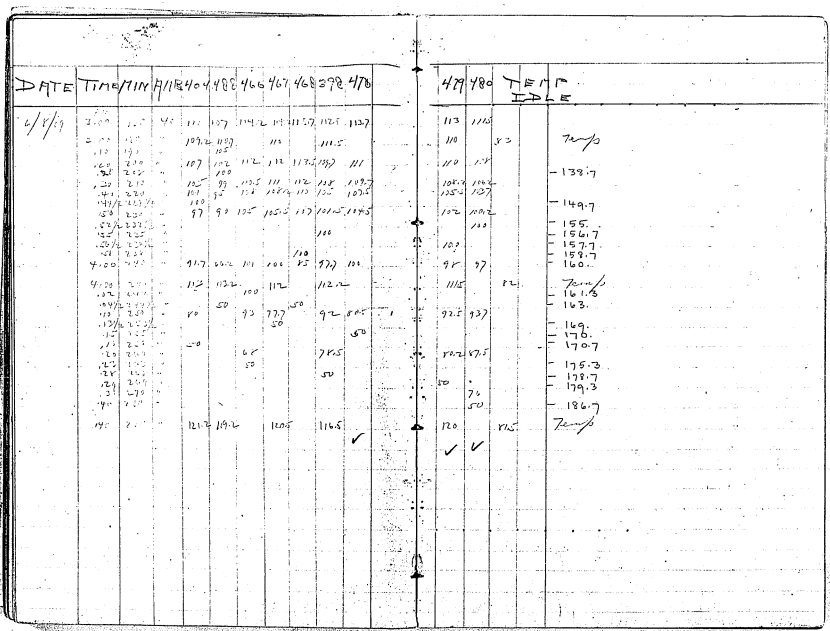
1237 | 1237 | 1242 | 845 | ✓ end

Cells 481, 482, 483 were removed and connected up on testing board for overcharge tests. ✓

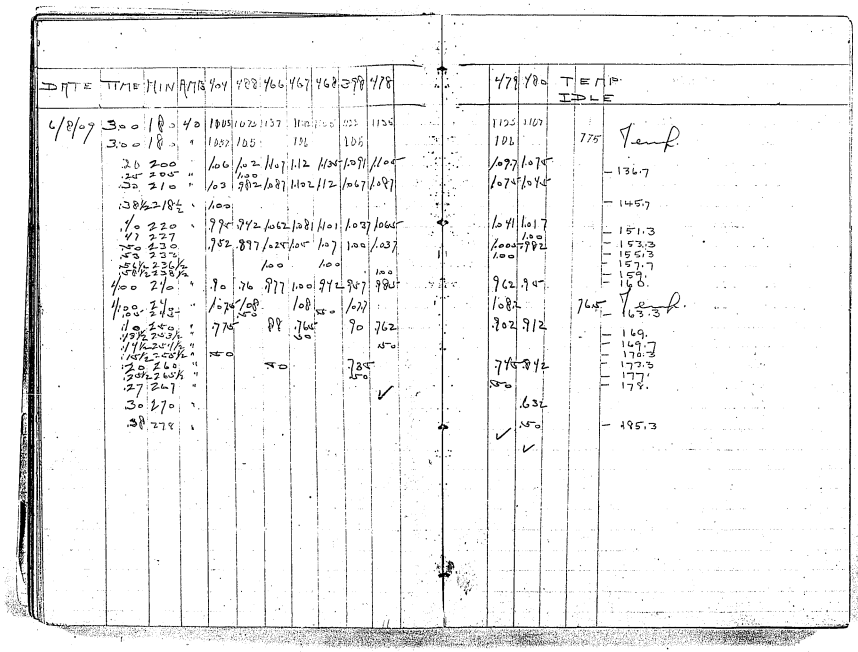
See 6/7/09 in individual record book.



DATE	TIME	MIN	TIME	#64	#66	#67	#68	#39	#78	#79	#80
6/1/09	Charge			#47	#100	(205)	#87	#210		(37)	Temp.
	4:55	0	"	1263/1		126		126		126	82
	5:55	60	"	1202 1205		120		120		1205	83
	6:55	120	"	1172 1197		1132		115		1142	82
	7:55	180	"	112 1145		1102		1091		1102	84
	8:55	240	"	1092 1085		1072		1065		108	86
	9:55	300	"	1069 1107		104		105		106	86.7
	10:55	360	"	1045 1065		1035		1047		1042	87
	11:55	420	"	104 106		104		1042		104	88
	12:55	480	"	176 176	178	1757	1753	1747	1745	1742	778 TD READING
	Discharge										
6/1	12:00	0	40	1432	1422	1432	1422	142	143	143	139.7 139
	:04	½	"	133	1324	133	133	133	1325	133	133 133
	:15	15	"	1305	130	131	131	131	1324	131	131 131
	:20	20	"	1264	127	1275	1265	1265	1265	1265	125.5 125
	:40	½	"	1242	1232	125	126	12555	1255	125	124.5 124.2
	1:00	60	"	122	121	123	123	124	123	123	122.2 122
	1:05	65	"	1072	108	109		108		108	107 Temp
	:20	80	"	120	1185	121	1215	1222	1205	120	120.2 120
	:40	100	"	1175	117	120	1202	121	119	120	119.5 119.5
	2:00	120	"	117	1155	119	119	120	118	1175	118 117.5
	2:05	125	"	108	109		109		1075		110 105 Temp
	:20	140	"	1167	1135	1167	117	1165	1165	1175	117 116
	:40	160	"	114	111	1145	1142	1125	115	115	115 114

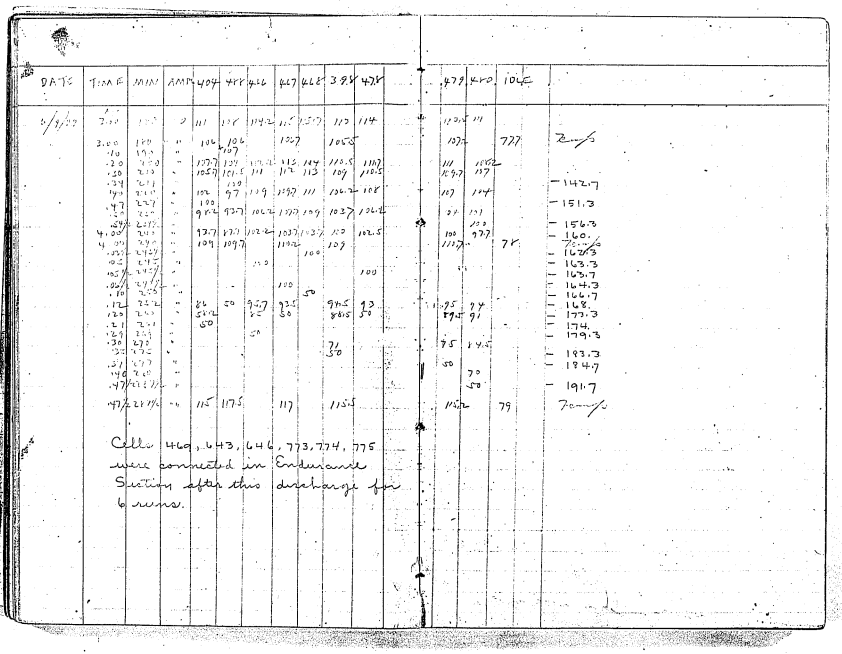

DATE
TIME/TIN
478
479
480
TEMP
IDLE
6/8/19
Temp
138.7
149.7
155.
156.7
157.7
158.7
160.
Temp
161.6
163.
169.
170.
170.7
175.3
178.7
179.3
186.7
Temp

DATE	TIME	MIN	AMB	465	488	466	467	468	478	479	480	TEMP IDLE
4/15/09	10 AM	0	23	123	124	117	121			120	120	Temp
	4:30	10		114	115	112	113			112	112	"
	5:00	20		111	112	109	110			109	109	"
	5:30	30		107	106	103	104			104	104	"
	6:00	40		103	104	100	102			102	103	"
	6:30	50		102	102	100	99			99	98	"
	7:00	60		100	100	98	98			100	98	"
	7:30	70		98	98	99	97			99	98	"
	8:00	80		177	175	178	178	175	177	177	177	Q.D.
				Discharge								
4/8/09	PM 12:00	0	40	1157	1142	1157			1157	1141		
	04	4	"	1332	1331	1326			1332	1331		
	10	10	"	1311	1302	1312			1317	1301	1312	
	20	20	"	1283	1282	1284			1283	1284		
	40	40	"	1255	1242	1252			1252	1255	1254	
	1:00	60	"	1222	1214	1223	1235	1224	1223	1228	1222	1227
	1:00	60	"	1.02	1.037		1.03		1.025	1.22	787	Temp
	1:20	80	"	1201	1191	1212	1215	1225	1207	1212	1205	1208
	1:40	100	"	1180	1172	1177	1202	1215	1192	1220	1190	1186
	2:00	120	"	1172	1157	1180	1192	1201	1218	1182	1181	1176
	2:00	120	"	1.035	1.057		1.052		1.032	1.044	787	Temp
	2:20	140	"	1165	1135	1178	1197	1185	1162	1177	1165	1167
	2:40	160	"	1135	1105	1116	1162	1172	1145	1186	1145	1135



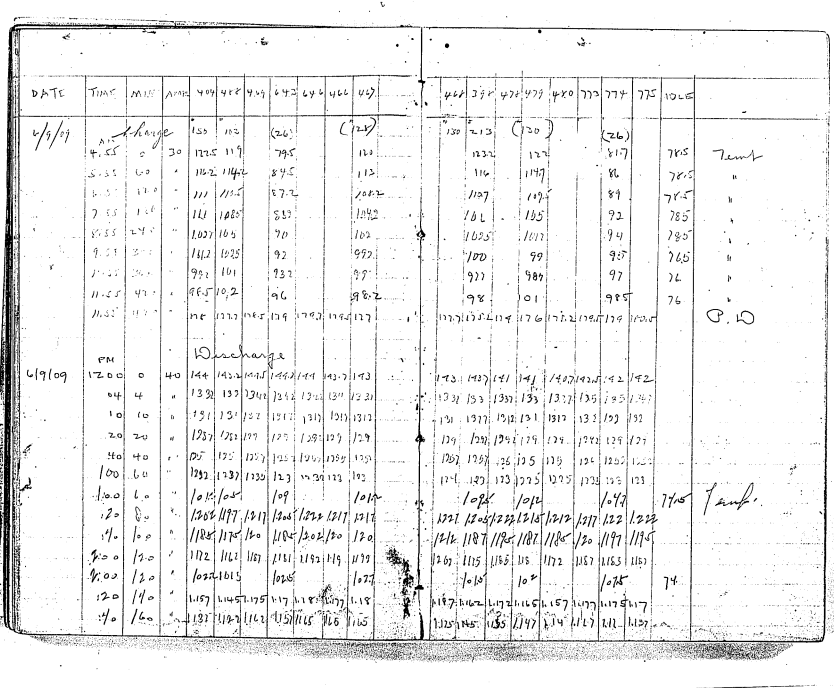
DATE	TIME	LIN	RATE	464	488	466	467	468	398	478	478	480	TEMP IDLE
6/8/07	3:00	18	40	1005	1022	1137	1100	1055	1023	1126	1125	1167	
	3:00	18	"	1052	1055		1121		1065		1065		775 Temp
	20	200		1006	1002 / 1100	1107	1112	1134	1091	1100	1077	1075	136.7
	25	205	"										
	30	210	"	1003	982	1087	1102	1112	1067	1089	1074	1045	
	38½	218½	"	1000									145.7
	40	220	"	998	992	1062	1081	1101	1037	1065	1041	1017	151.3
	41	221	"								1000	1000 / 982	
	42	222	"	992	977	1045	1071	1091	1037		1000		153.3
	43	223	"										155.3
	45½	225½	"		1000		1000						157.7
	48½	228½	"						1000				159.
	50	230	"	990	976	977	1000	994	987	988	962	945	160.
	50	230	"	1075	1050		1081	1100	1027		1082		765 Temp 163.3
	10	240	"	775		88	1044		990	762	902	912	169.
	13½	243½	"							1050			169.7
	14½	244½	"	840									170.3
	20	250	"			940			785		775	842	172.3
	20½	250½	"						1050		880		177.
	27	257	"							✓			178.
	30	270	"								632		
	38	278	"								✓	1050 ✓	185.3

DATE	TIME	MIN	AMB	404	408	466	467	468	378	478	479	480	TEMP IDLE	
6/8/09		change		149	102	42.7	129	2/2						
	P.M. 4:55	0	30	1086/1087		110	111				1126	76		Temp
	5:55	60	"	1093/1085		1057	1067				1062	75		"
	6:55	120	"	1047	106	101	1017				1005	749		"
	7:55	180	"	1012	101	96	977				974	745		"
	8:55	240	"	977	982	942	957				94	745		"
	9:55	300	"	97	972	947	96				957	745		"
	10:55	360	"	96	98	97	965				97.5	762		"
	11:55	420	"	98	99.5	977	94.2				94	77		"
	11:55	420	"	180	180	180.5	179.5	179.5	179.5		179.5	179.5		C.D.
6/9/09	A.M. 12:00	0	40	144.5	142.7	145	143.2	143	144	144		141	139.5	
	10	4	"	133	132.5	133.7	133.2	133.5	135	133.5		133	133	
	20	10	"	131	130.2	131.5	131.5	131	132.5	131		131	131.5	
	30	20	"	128.5	127.7	128.5	128	128.5	130	128.5		128.5	128.5	
	40	30	"	125	124	125	124.7	126	126	125.5		125	125	
	50	40	"	122.2	121	122.5	122.5	122.4	122.3	122.3		122.5	122.2	
	100	50	"	102	102		102.5		102			102.7	77.7	Temp
	110	60	"	120	119	120.5	120.7	122.5	121	121		120.5	120	
	120	80	"	117.5	117.5	118	120.2	121.5	119.5	119.7		119.5	119.2	
	130	90	"	117.5	117.5	118	119.5	120.4	118.5	119		117.5	117.5	
	140	100	"	117.5	117.5	118	119.5	120.4	118.5	119		117.5	117.5	
	150	110	"	117.5	117.5	118	119.5	120.4	118.5	119		117.5	117.5	
	200	120	"	117	104.7		105		102.7			104	76 K	Temp
	210	130	"	116	114.2	115	114.2	119	117	117		117.5	116	
	220	140	"	114	112.2	113.5	116.5	117	115.5	116.5		116.5	114.7	



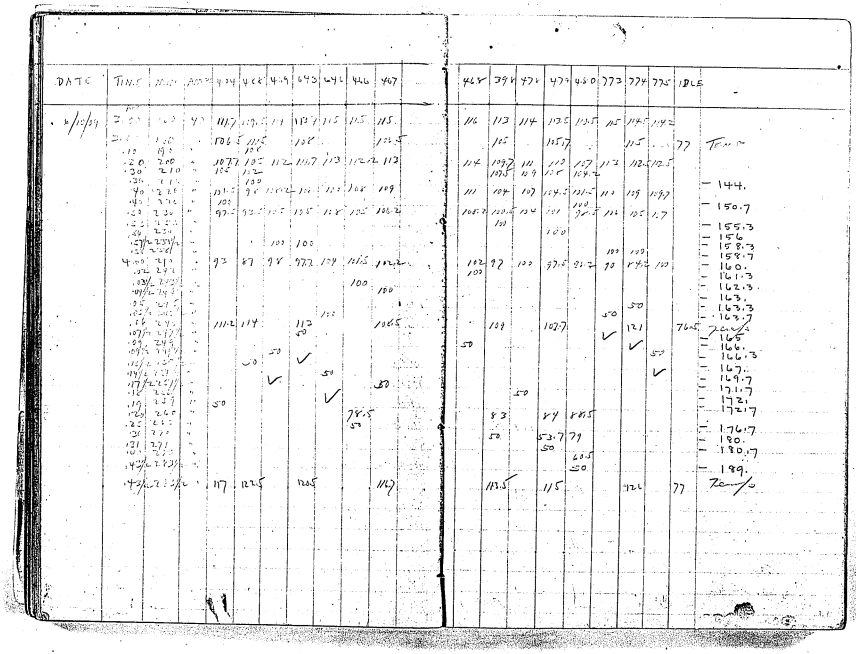
DATE	TIME	MIN	AMP	404	422	426	447	468	3.85	478	479	480	1046	
4/3/17	2:00	120	2	111	134	134.2	115	1507	112	114	112.5	111		
	3:00	120	"	106	106			1227	1065		107		777	2 wks
	.10	120	"		107									
	.20	120	"	1227	127	127.2	112	147	110.5	1107	111	1052		
	.30	120	"	1057	121.5	111	117	113	109	1105	1157	117		
	.39	120	"		129									— 1427
	4:00	120	"	102	97	119	1557	111	1062	108	107	104		
	.47	120	"	103							97	101		— 151.3
	.57	120	"	97.2	93.7	102.2	1377	109	1037	1042		102		— 156.3
	5:00	120	"								100	102		— 160.
	4:00	120	"	127	127	102.2	1037	113.5	110	102.5	1117	107	77	76 wks
	.20	120	"	109	1097		1102		103					— 162.3
	.40	120	"					100						— 163.3
	.55	120	"											— 165.7
	6:00	120	"							100				— 164.3
	.10	120	"				100							— 166.7
	.12	120	"	86	50	93.7	93.5	50	97.5	93	1.75	94		— 168.
	.20	120	"	5512		92	80		8615	50	1795	91		— 173.3
	.21	120	"	60										— 174.
	.29	120	"			50								— 179.3
	.30	120	"						70		95	104		
	.32	120	"						50					— 183.3
	.37	120	"								100			— 184.7
	.46	120	"									70		
	.47	120	"									50		— 191.7
	47½	2:17½	"	115	1175		117		1155		1142		79	7 wks

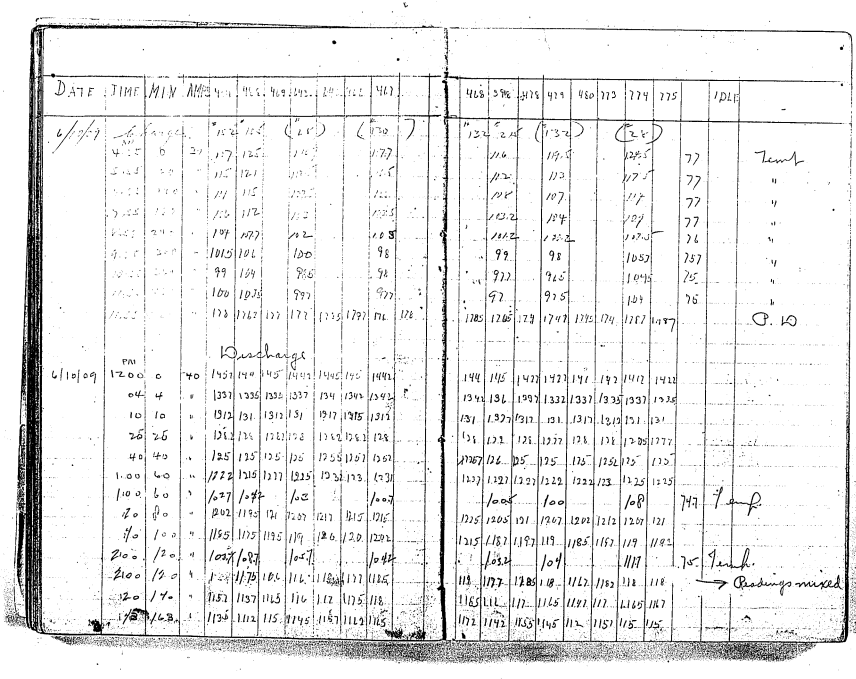
Cells 469, 643, 646, 773, 774, 775 were connected in Endurance Section after this discharge for 6 mins.



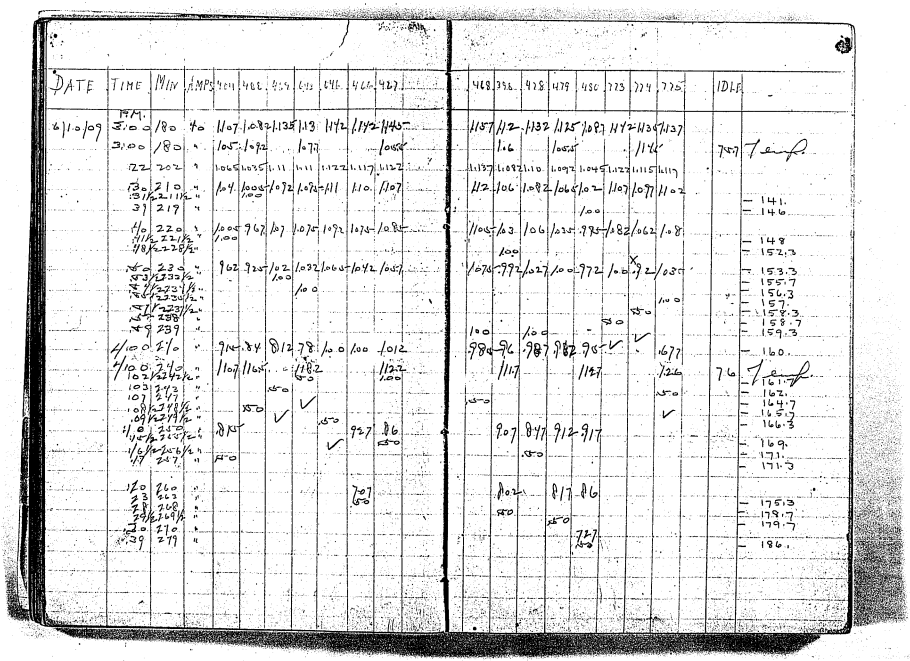
DATE	TIME	MIN	AMB	407	408	469	672	674	771	467	468	398	478	777	480	773	774	775	466 Temp.
6/9/07	3:00 PM	180	40	1107	1092	1174	1147	1144	1145	1145	1147	1172	1132	1122	111	1162	1174	1172	
	3:00	180	"	103	1086		1072			1072		1024		1030			1172		74 Temp.
	12:	200	"	1062	1072	1124	112	1132	1115	1112	1136	1082	110	1089	107	1137	1113	1122	
	30	210	"	103	100 1088	1112	1107	112	1093	112	1112	1084	1085	101	104	1125	112	111	
	35	215	"		100														
	40	220	"	1082	1088	110	1093	111	1087	1093	1102	103	1062	1035	103	1117	111	110	- 143.3
	45	225	"	100											100				- 147.
	50	230	"	1065	1073	108	1077	1072	1087	1087	1077	1094	1032	100	1094	1102	109	108	- 152.3
	55	235	"																- 157.3
6/10	0	240	"	917	1087	1045	104	1045	1005	1087	100	952	100	984	962	1045	1045	1042	- 160
	5	245	"	106	1117		1077					106		106			1065	74 Temp.	
	10	250	"					100		1085									- 160.3
	15	255	"																- 164.3
	20	300	"																- 165.
	25	305	"																- 165.7
	30	310	"																- 166.7
	35	315	"																- 169.3
	40	320	"																- 170.3
	45	325	"																- 170.7
	50	330	"																- 171.
	55	335	"																- 171.3
	60	340	"																- 172.7
	20	260	"																
	23½	263	"																
	25	265	"																- 175.3
	27½	267½	"																- 176.7
	26	266	"																- 177.3
	27½	267½	"																- 178.3
	25	265	"																
	40	255	"																
	46	246	"																- 1907
																		74 Temp.	

DATE	TIME	MIN	AMB	484	488	469	643	642	466	467	468	398	478	479	480	772	774	776	Adele Temp.
6/9/09	P.M. Charge			101	104	27	(129)				101	214	(131)			(127)			
	4:45	0	30	114	1112	1104			114			115	1162			1227		73.7	Temp
	5:45	60	"	113.2	111.2	109.2			109			111.5	107			115		74	"
	6:45	120	"	107	115	105			106			106	107			111.2		73.7	"
	7:45	180	"	106	109.2	103			1016			1032	102			108		74	"
	8:45	240	"	102	1044	101			994			1007	1002			1067		74.7	"
	9:45	300	"	101	101	1002			99			986	982			106		74.7	"
	10:45	360	"	101	1034	1002			99			994	99.2			104		75	"
	11:45	420	"	101	1037	1017			100			100	99			106.2		75	"
	11:45	420	"	1182	117	117	1177	1157	1145		174	1767	174	177	1745	1755	175	1765	TEMPERATURE READING
6/10/09	P.M. Discharge																		
	12:00	0	0	145	1137	115	1435	144	1444	142		143	1427	1402	140	1397	142	143	140	
	.04	4	"	134	1335	134	1337	134	134	1342		1327	1327	1327	132	1327	1327	1327	133	
	.10	10	"	1317	1315	132	132	132	132	132		1317	133	132	1317	132	1317	1317	1317	
	.20	20	"	129	1285	129	129	1287	1297	129.5		129	1302	1295	129	129	129	129	129	
	.40	40	"	1265	1265	1265	126	126	126	126		126	1265	1265	1265	1265	1265	1265	1265	
	1.00	60	"	123	123	123	123	123	1237	123.7		123.4	123	123	122.4	1234	1234	1235	1235	
	1.00	60	"	103	1035		103			103.5			1015		103		1055		74	Temp
	.20	80	"	124.5	124	124.2	124	124.2	1247	124		123	121	1215	121	1205	1215	121	121	
	.40	100	"	1187	118	1187	119	120	1202			1215	119	120	119	118	1197	119	1197	
	2.00	120	"	113	117	1185	118	119.5	1195	120		120.5	1162	1195	1185	1177	119	1165	1155	
	2.00	120	"	1055	1085		1065			106.5			104		103		103		74	Temp
	.20	140	"	1145	115	117	117	118	1182	1182		119.7	117	118	117	116	118	117	1175	
	.40	160	"	1142	1122	1157	1165	1165	117	117		117	1155	116	1157	114	1167	116	116	





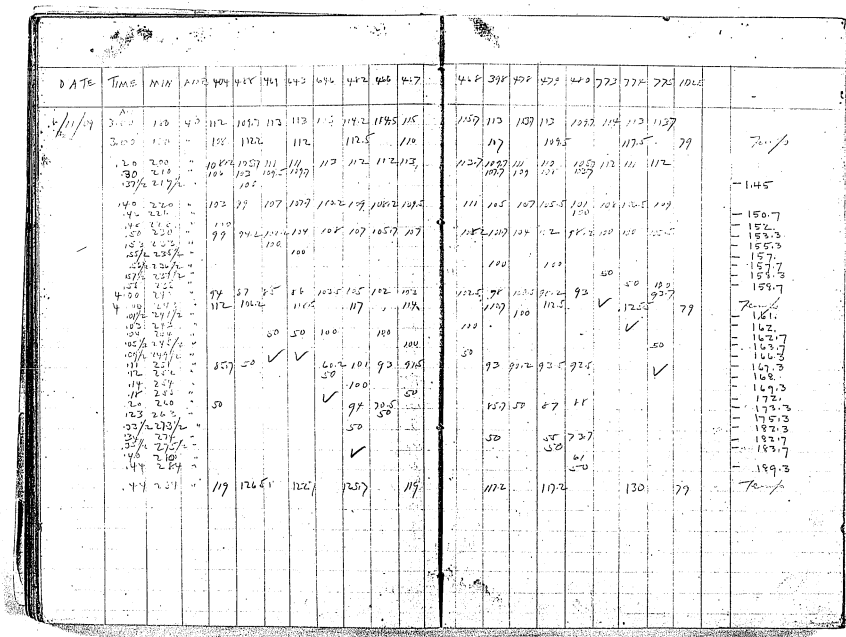
DATE	TIME	MIN	AM/PM	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	TEMP	
6/9/09		Range		(1252)	(1254)	(1256)	(1258)	(1260)			(1232)	(1234)		(1236)						
	4:15	0	PM	1257	1255	1256		1260		1277				1265				77	Temp	
				1252	1251															
				1252	1251															
				1251	1250															
				1255	1252															
				1256	1252															
				1254

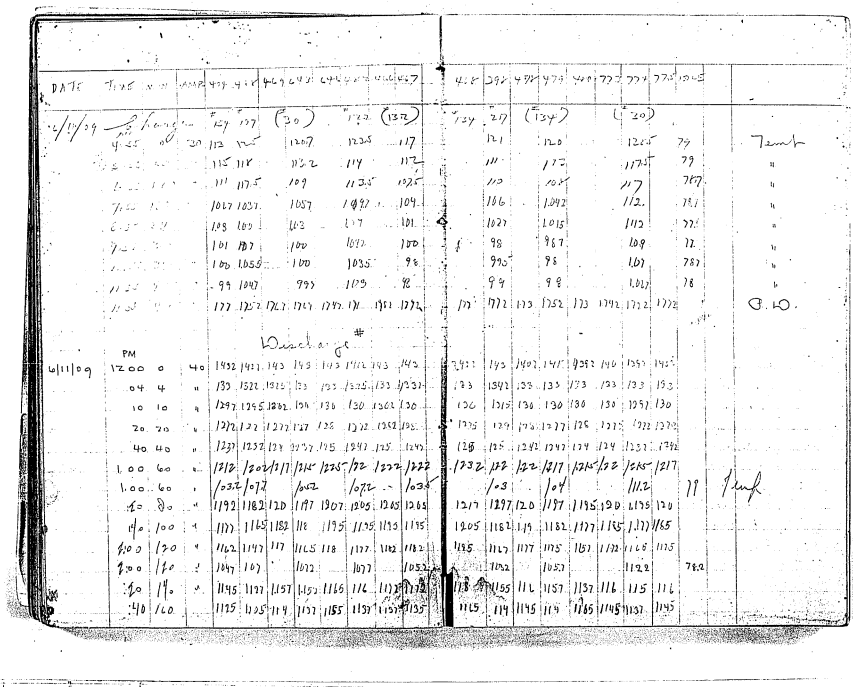


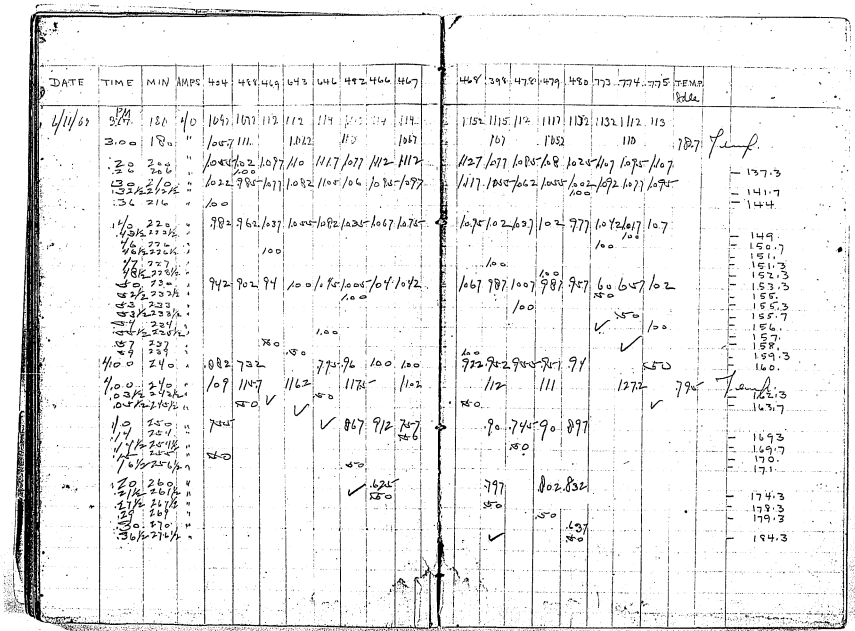
DATE	TIME	MW	AMPS	464	466	465	465	466	467	468	356	478	479	480	773	774	775	IDLE	
6/10/09	PM. 3:00	/80	40	1107	1082	1135	113	1142	1142	1145	1157	1112	1132	1125	1083	1142	1134	1137	
	3:00	/80	"	1065	1092		1079		1065		1.16		1065			1146		787	Temp
	22	202	"	1066	1035	1111	1111	1122	1117	1122	1137	1.082	1.110	1.092	1.045	1.122	1.115	1117	
	30	210	"	104	1005	1072	1078	111	110	1107	1112	1106	1082	1066	102	1107	1077	1102	
	31	217	"												100				— 141.
																			— 146
	40	220	"	1005	967	107	1075	1092	1084	1085	1005	103	1061	1035	975	1082	1062	1085	
	48	220½	"	1.00								100							— 148
	48	220½	"																— 152.3
	50	230	"	962	925	102	1032	1060	1042	1057	1076	992	1027	100	972	100	1035		— 153.3
	53	230½	"			100													— 155.7
	54	230½	"													100			— 156.3
	57	230½	"																— 157
	57	230½	"												50				— 158.3
	59	230½	"																— 158.7
	59	239	"								100		100		50	✓			— 159.3
	4/100	240	"	9100	84	812	78	100	100	1012	984	96	987	982	95	✓	1077		— 160.
	7/100	240½	"	1107	1105		1182			1127		1117		1127			1126	76	Temp
	102	240½	"				100			100									— 161.7
	103	241	"			50					50						50		— 162.
	107	241	"			✓													— 164.7
	108	241½	"	50													✓		— 165.7
	109	241½	"			✓		50											— 166.3
	110	241	"	814					927	86		907	847	912	917				
	110	241½	"					✓		50			50						— 169.
	115	241½	"																— 171.
	117	241	"	50															— 171.3
	120	260	"						727			802		817	86				
	123	263	"						50			50							— 175.3
	125	268	"											50					— 178.7
	128	269½	"												727				— 179.7
	130	270	"												50				
	139	279	"																— 186.

Call #482 put in here for 50 more another once runs.

DATE	TIME	MIN	#118	#04	#88	#69	#63	#46	#82	#66	#67	#68	#38	#78	#77	#88	#73	#74	#74	TEMP HOLE
6/10/09	Change		#103	/06	(29)		121		(131)			(133)	216	(133)		(29)				
	4 AM	0	30	/102	/217		119		772		117		117.7		118		/23			76. Tank
	5 AM	60	"	/16	/207		/117		107		/11.2		/13		/112		118.2			762 "
	6 AM	120	1	/117	/152		/08.2		92		/07		/07.2		/08.2		113			765 "
	7 AM	180	6	/09	/127		106		94		/06		/04.7		/0765		/107			77 "
	8 AM	240	1	/04	/097		/03		975		/027		/037		/03.2		/10			772 "
	9 AM	300	4	/035	/06		/01		97.7		/02		/00		/017		/07			772 "
	10 AM	360	4	/017	/07		/03		98.2		/032		/00		/017		/07			765 "
	11 AM	420	4	102	105		103.5		99.7		/03		/00.5		/02		/07.2			777 "
	12 PM	480	4	17.2	176.2		176.5		176.8		177.2		177		176.2		177			774 T.P. TIE READING
6/11/09				Change																
	12:00	0	4	148	143		1137		142		142.5		141		144.5		144.5			
	:04	4	"	132.5	132.2		132.5		132.5		133.2		133		133.2		133			
	:10	10	"	130.5	130.2		130.5		130.5		130.2		131		131.5		131			
	:20	20	"	127.5	127		127		127		127		127		127.5		127			
	:40	40	"	124.2	124		124.7		124.5		125		124.5		125.5		125			
	1:00	60	"	122	121		122		122		123		123.5		123.5		122			
	1:00	1:0	"	104.7	110		105		107		104.7				105.2		104		1125	762 Temp
	:20	80	"	120	119		120.7		120		121.5		124		122.5		120.5		121	
	:40	100	"	119	117.7		119		116.5		120		120.2		121.5		120		119	
	2:00	120	"	117.5	116		117.7		117		116.5		119		119		118		117	
	2:00	123	"	116.5	116.5		109.5		109		105.2				105		107.5		1142	770 Temp
	:20	140	"	116	114.5		116.2		116		117.7		117		119		116.5		117	116.5
	:40	160	"	114.2	112.2		114.5		114.2		116		116.7		117.5		115.5		115.5	115.5





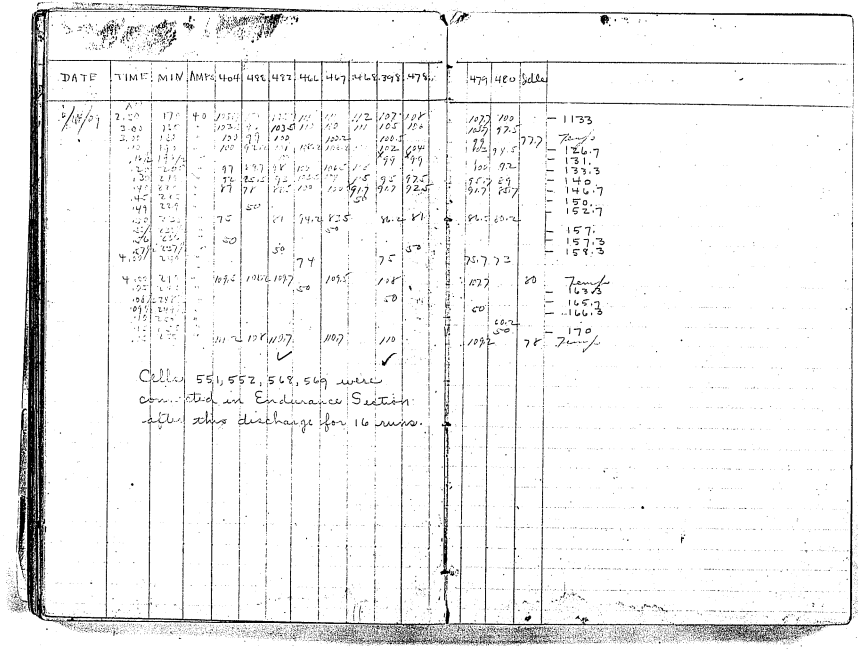


DATE	TIME	MIN	AMPS	424	428	429	643	646	482	466	467	468	398	478	479	480	773	774	775	TEMP Rdg	
4/11/63	9:24	120	4/0	1067	1071	112	112	114			114	1152	1115	112	1117	1132	1132	112	113		
	3:00	180	"	1057	111.		1042		110		1067		1067		1052		110			1087	Temp.
	20	200	"	1045	1002	1077	110	1117	1077	1112	1117	1127	1077	1085	1068	1024	1107	1075	1107		
	25	250	"	1022	1000	1077	1092	1100	1064		1085	1117	1055	1062	1055	1002	1092	1077	1095		137.3
	32½	320	"		980						1097					100					141.7
	35½	350	"																		144
	36	216	"	100																	
	1/3	220	"	982	962	1037	1045	1082	1025	1067	1075	1075	102	1037	102	977	1042	1017	107		
	3½	223½	"														100				149.
	6	226	"			100															150.7
	6½	226½	"										100								151.
	7	227	"																		151.3
	7½	227½	"																		152.3
	8	228	"	942	902	94	100	1075	1004	104	1042	1067	1087	1007	100	987	957	60	1057	102	153.3
	8½	228½	"						100						100			100			156.
	8½	233	"					100													155.3
	8½	233½	"																		155.7
	8½	234	"																		156.
	8½	234½	"																		157.
	8½	237	"			80	50														158.
	8½	238	"																		159.3
	10	240	"	882	732			775	96	100	100	60	922	942	985	957	94		50		160.
	10	240	"	109	1147		1162		1174		1102		112		111			1272		795	Temp.
	10	240	"			80		80				80									162.3
	10	240	"																		163.7
	10	240	"	745					867	912	767		90	745	90	897					
	17	240	"									80									169.3
	17½	240	"	80																	169.7
	17½	240	"																		170.
	17½	240	"					80													171.
	20	260	"						625				797		802	832					
	21½	261½	"						80			80									174.3
	21½	262½	"																		178.3
	21½	263	"											80							179.3
	30	270	"												637						
	30½	274½	"												80						184.3

DATE	TIME		#118	#117	#116	#115	#114	#113	#112	#111	#110	#109	#108	#107	#106	#105	#104	#103	#102	#101	#100	TEMP TABLE
6 11 09	A.M.	change																				
	7:55	0	30	118	121	121.2		122		118				116.7		118		126.2		80		temp
	8:55	60	"	116	119	114.7		116		112				111.7		113.5		118.2		80		
	9:55	120	"	116.2	117	107.7		113		104.7				108.2		107		116		80		
	10:55	180	"	107	113.2	105		110		103.7				106		104.5		113.2		81		
	11:55	240	"	106	108.7	104.2		107.2		103.2				102		102		110.7		79.2		
	12:55	300	"	103.2	108.2	102.7		104		102				100.7		102		107.2		78.4		
	1:55	360	"	101	106.2	101		106		100.2				101.7		100		104.7		78.2		
	2:55	420	"	102.5	105	101.7		105		101				102		100.5		100.5		77.7		
	3:55	480	"	177.7	175.7	176.5	176.2	175	177.1	179	177			177.1	176	177.2	175.7	173	175	177.2	177.2	TEMP READING
6/12/09	A.M.	change																				
	2:10	0	40	144	143	144	142.2	142	141	141.7	141.7			141.7	141.7	139	139	137	136.2	139.7	139	
	.04	4	"	133	133.5	133	133	133.2	132.5	133.1	133.5			132	135	132.2	133	133.7	133	133	133	
	.10	10	"	133.5	133.2	133.5	133.2	133	132.7	133	133			132.5	132	131	131	131	130.2	130.2	131	
	.20	20	"	128	128	128.7	128	129	128.5	129	129			128.5	129.7	128.5	128.5	128.5	128	127.7	127.2	
	.40	40	"	124.2	124	124.5	124.2	124.7	125	125.5	124			125.7	125.5	125	125	124.7	124.2	124	125	
	1.00	60	"	122	121	122	122.2	122	123	123	122			123.7	123	123	122.2	122	122.2	121.7	122.5	
	1.08	60	"	115	117		116.5		117		114.7				102.7		105.7		115		77.5	temp
	.20	80	"	120	119	119.2	120	121.5	121.5	121.5	121.5			122.2	120.2	121	120.2	120.2	120.2	120	121	
	.40	100	"	118.2	117.5	118	117.5	118.2	118	120	120			121	119	120	119	119.2	119	118.5		
	2.00	120	"	117	115.2	117	116.5	118	118	119	118			120	117.5	117.2	117.2	117.2	116	117.2	117.2	
	2.00	120	"	106	108.5		108		109.2		116				104		106		113.5		77	temp
	.20	140	"	115.5	112.7	116	113.5	117	116.2	117.2	115.7			116.2	116	116.5	116.7	116	115	114.2		
	.40	160	"	113.5	111	113.2	114	115.7	114.2	113.2	111.2			117	114.2	115	113.5	113.5	112.7	112.5		

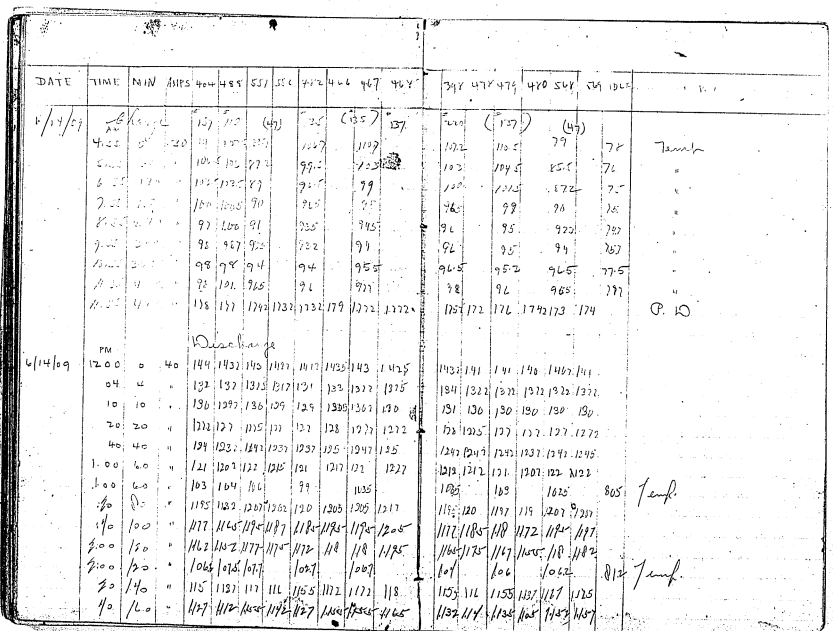
DATE	TIME	MIN	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	TEMP	TABLE	
6/17/09																				

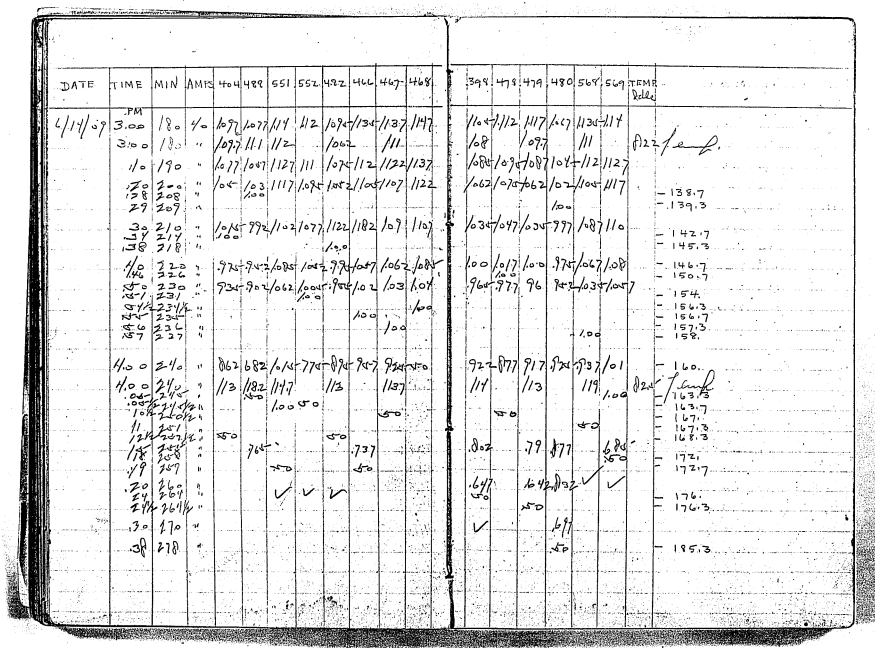
DATE	TIME	MIN	AMPS	4a4	4a8	4a2	4a6	4a7	4a9	4a8	4a4	4a9	4a0	Idle		
	AM			156	109	124		(134)	136	219		(136)				
6/17/87	4.55	0	30	119.2	122	133.2		115.2		113.5		113.	75.7	Temp		
	5.55	60	"	114.	116.5	114.		110.5		109.5		111.	75	"		
#	6.55	120	"	111.	111.2	104.5		107.		106.		108.	75.7	"		
	7.55	180	"	106.5	106.5	102.		102.		102.		104.	75.7	"		
	8.55	240	"	101.	100.7	97.		97.5		98.		98.2	76.2	"		
	9.55	300	"	97.5	96.7	93.		95.		95.		95.7	76.5	"		
	10.55	360	"	96.	95.	93.		94.		94.2		94.2	78.	"		
	11.55	420	"	96.7	96.	93.7		94.		95.2		95.5	79.5	"		
				179	179	179	180	179	178	178		178	177	176	C. L.	
	Stood	cable	36	hours	over	Sunday										
6/14	AM															
	12.00	0	40	128	132	132	127	125	127	132		127	126	126	78	Temp
	12.00	0		128	129.7	132		120		128		120				
	04	4	"	122	126	126	123	122	122	124		122	122	122		
	10	10	"	120	119	121	121	121	121	122		121	121	121		
	20	20	"	119	117	119	120	120	120	120		120	119	119		
	40	40	"	117	115	116	116	117	119	118		118	117	117		
	1.00	60	"	115	114	115	117	117	116	116		117	116	116		
	1.00	60	"	88	88	87		89		87		88		88	78.2	Temp
	20	80	"	114	113	116	116	116	118	115		116	115	114		
	40	100	"	113	111	115	115	116	119	114		115	114	112		
	2.00	120	"	111	108	112	114	114	117	112		113	113	110		
	2.00	120	"	95	94	95		95		96			94	92	78	Temp
	20	141	"	110	107	111	113	113	116	111		112	111	110		
	30	150	"	109	106	110	113	113	115	110		111	110	109		
	40	160	"	107	104	109	112	112	113	108		109	108	107		



DATE	TIME	MIN	AMPS	404	489	487	466	467	468	398	479	479	480	Sdlc	
6/18/07	2:00	17	40						112	107	104	107	100		1133
	3:00	35			103	111	110	111	110	105	106	105	97.5		
	3:35	48			100	99	100		100.2			99		77.7	Temp
		113				99	100.6		100.4			102	97.5		126.7
		123								99	99				131
		133			97	97	98	100	100.2	95	99	100	92		133.3
		143			96	95	96	97	97	95	95	97.7	89		140
		153			97	97	97	100	100	97	97	97.7	85.7		146.7
		163								97					150.
		173				100									152.7
		183			75		67	74.2	82.5		86.4	81			
		193							100				60.2		157.
		203			80										157.3
	4:57	207				50					50				158.3
		217					74			75		75.7	72		
	4:55	215			104.2	106.2	103.7	100	103.5	108		107		80	Temp
		225									50				163.3
		235										60			165.3
		245											60.2		
		255											50		170
		305			110	110.7		110.7		110		109.2		74	Temp

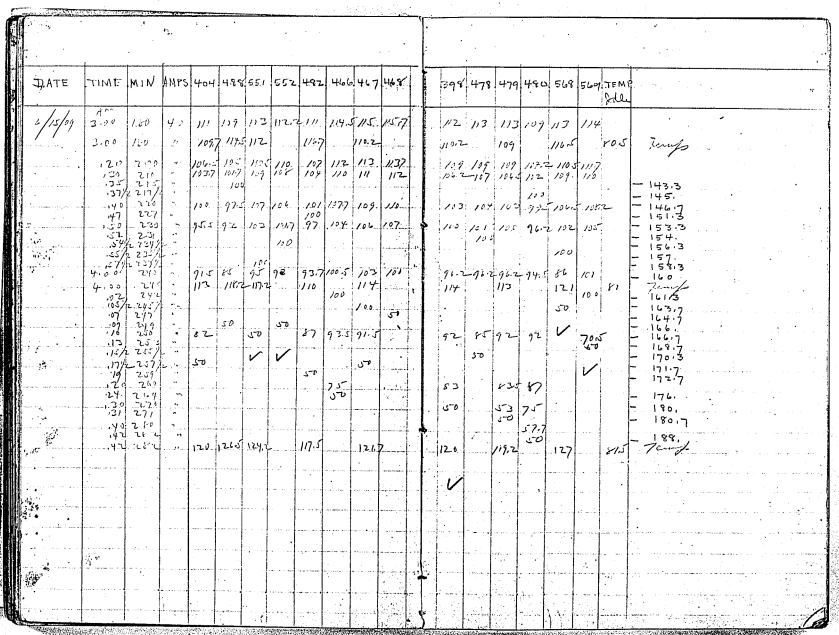
Cells 551, 552, 568, 569 were connected in Endurance Section after this discharge for 16 hours.



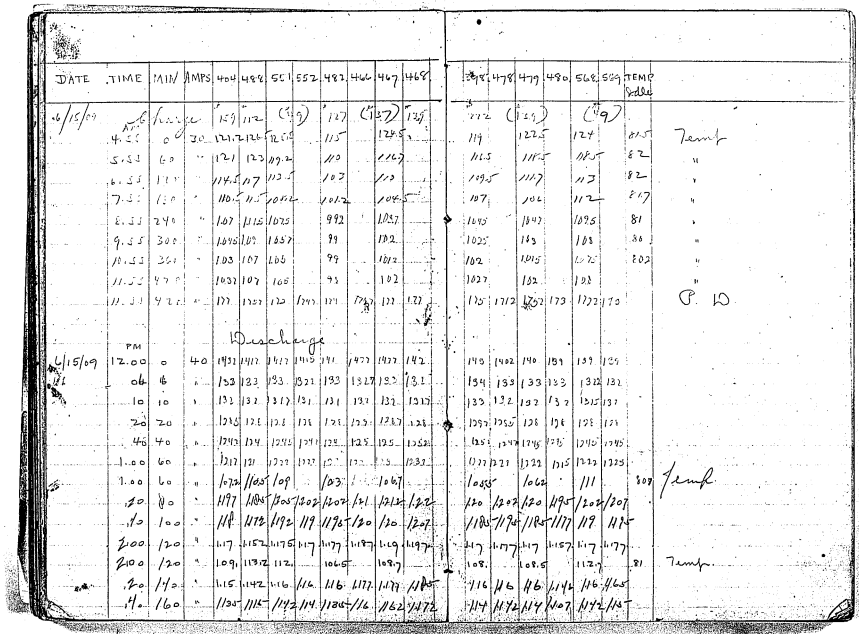


DATE	TIME	MIN	AMIS	404	488	551	552	482	466	467	468	398	478	479	480	568	569	TEMP Delay	
4/14/09	PM 3.00	180	40	.089	.107	.114	.112	.089	.134	.137	.147	.104	.112	.117	.107	.113	.114		
	3:10	190	"	.077	.111	.112		.062		.111		.068		.077		.111		122	Jemf.
	.10	190	"	.077	.104	.127	.111	.076	.112	.122	.137	.084	.093	.088	.104	.112	.127		
	.20	200	"	.104	.103	.111	.084	.062	.084	.107	.122	.062	.076	.062	.102	.104	.117		
	.28	208	"		.100										.100				138.7
	.29	209	"																139.3
	.30	210	"	.104	.098	.102	.077	.122	.182	.109	.102	.034	.047	.030	.097	.068	.110		142.7
	.34	214	"	.100															145.3
	.38	218	"					.120											
	.40	220	"	.134	.134	.085	.104	.098	.084	.062	.084	.100	.017	.100	.134	.084	.108		146.7
	.50	230	"	.134	.102	.062	.100	.098	.102	.103	.104	.096	.097	.096	.102	.034	.084		150.7
	.51	231	"				.100												154
	54½	234½	"						.100		.100								156.3
	54½	234½	"																156.7
	56	236	"						.100							.100			157.3
	57	237	"																158.
	1.00	240	"	.062	.082	.104	.077	.084	.084	.084	.100	.027	.077	.017	.034	.037	.101		160.
	1.00	240	"	.113	.102	.117		.113		.137		.114		.113		.119	.100	122	Jemf.
	.04	244	"		.100	.100			.100										163.3
	.08	248	"										.100						163.7
	.10	250	"							.100									167.
	11	251	"												.100				167.3
	.12½	252½	"	.100				.100											168.3
	.15	255	"		.096				.137			.082		.079	.077	.084			172.
	.17	257	"			.100		.100											172.7
	.20	260	"									.047		.046	.093				176.
	.24	264	"									.100		.100					176.3
	.24½	264½	"																
	.30	270	"												.097				
	.38	278	"												.100				185.3

DATE	TIME	MIN	AMPS	486	488	551	552	482	466	467	468	398	479	479	480	528	529	ITEMS
																		Idle
	8 Change		108	111		8/81	126	136	138		121	138				8/8		
6/14/07	1441	0	30	192	204	223		111		122		117		123		129	123	Temp.
	5PM	60	"	118	124	146		1117		115		118		115		118	114	
	6PM	120	"	116	118	147		1047		1117		1107		113		113	113	
	7PM	180	"	108	112	092		100		104		1045		106		108	112	
	8PM	240	"	104	102	094		108		100		1025		104		107	117	
	9PM	300	"	122	108	103		972		984		1012		902		1062	112	
	10PM	360	"	102	102	103		98		100		1017		1002		1077	1025	
	11PM	420	"	104	105	105		97		102		1002		1022		1047	111	
	11PM	420	"	177.5	176	172	174	174	177.5	177.5	177	172.5	172	176	172.5	172	173	T.D.
	8PM	Discharge																
6/15/07	12:00	0	10	144	142	142	141	140	142	144.5	144.5	142	132	132	134	132	132	
	.04	1	"	133	133	132	132	132	133.5	132.5	133	135	133	133	133	132.5	132.5	
	.10	10	"	131	130.5	130	130	130	131.5	131	131	132.5	131	132	132	132.5	132	
	.20	20	"	128.5	128	128	127.5	127.5	129	128.5	128.5	129	128.5	128.5	128.5	128	128	
	.40	40	"	126.5	126	126.5	126	126	126.5	126.5	126.5	126.5	125	126.5	126.5	126.5	126.5	
	1.00	60	"	122	121	122.5	122	122	123	123	123.5	122.5	122.5	122	122.5	122.5	122	
	1.00	60	"	107	106.5	106.5		101		105.5		102.5		105.5		111	99.5	Tank
	.20	80	"	120	119	120.5	120.5	120	121	121	122	120	120.5	120	119.5	121	121	
	.40	100	"	118.5	117.5	118.5	119	119.5	120	120.5	121	119	119.5	119	118	119.5	120	
	2.00	120	"	117	116	117	117.5	117	118.5	119	120	117	117.5	117.5	116.5	116.5	116.5	
	2.00	120	"	106.5	112.5	109.5		104.5		109.5		107.5		106.5		113.5	99.5	Tank
	.20	140	"	115	114.5	116	116.5	115	117	118	118.5	116	116.5	116	114	115.5	117	
	.40	160	"	113.5	113.5	114.5	114	113.5	116	116.5	117	114.5	114.5	114.5	112	115	115.5	



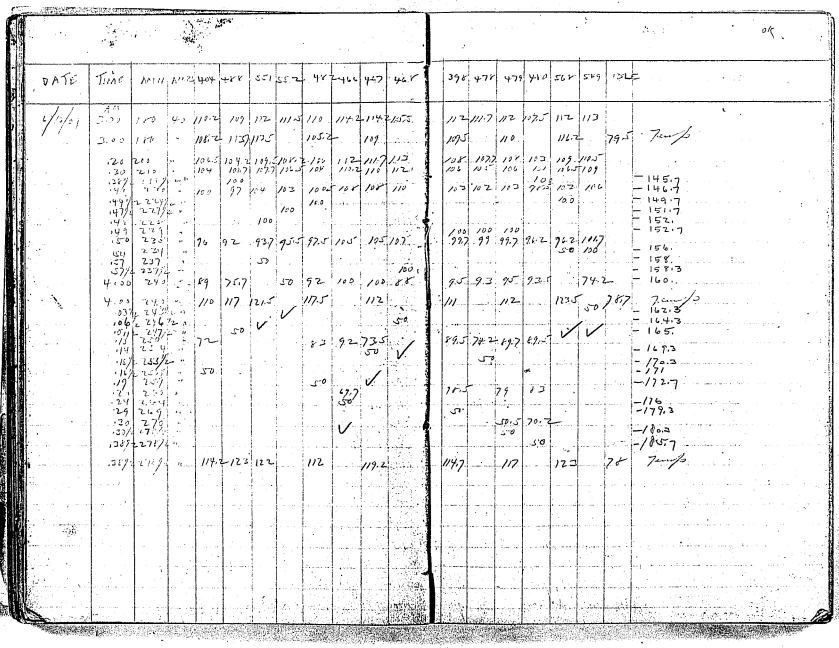
DATE	TIME	MIN	AMPS	404	488	551	552	492	466	467	468	398	478	479	480	568	569	TEMP Pole	
6/15/09	3:00	120	40	111	117	112	112.7	111	114.5	115.	115.7	112	113	113	109	113	114		
	2:00	120	40	1087	112.5	112		1107		1122		1102		109		116.5		805	Temps
	1:20	2:00	"	1064	120	120	110	107	112	113.	1137	119	118	119	112	110.5	1117		
	1:20	2:15	"	1027	1067	109	105	104	110	111	112	102	107	106	112	109.	110		
	1:35	2:15	"			104									103				143.3
	1:35	2:17	"																145.
	1:40	2:16	"	100	97.2	107	106	101	1077	109.	110.	103	104	103	93.2	106.2	1082		146.7
	1:47	2:21	"					100											161.3
	1:50	2:30	"	95.5	92	102	1047	97	104	106	107	100	101	105	96.2	102	105		153.3
	1:52	2:21	"										100						154.
	1:58	2:29	"					100											156.3
	2:25	2:30	"													100			157.
	2:27	2:32	"			100													158.3
	4:00	2:15	"	91.5	85	95	98	93.7	100.5	103	103	91.2	91.2	92.2	94.5	86	101		160.
	4:30	2:15	"	112	1102	110.2		110		114		114		113		121	100	81	Temps
	2:32	2:45	"						100										161.3
	1:03	2:32	"							100						50			163.7
	1:07	2:37	"								59								164.7
	1:07	2:43	"		50														166.
	1:12	2:50	"	82		50	58	87	93.5	91.5		92	85	92	92	✓	705		166.7
	1:13	2:51	"										50				60		169.7
	1:14	2:52	"			✓	✓												170.3
	1:17	2:57	"	50						50							✓		171.7
	1:18	2:58	"					50											172.7
	1:20	2:60	"						73 50			83		82	87				
	1:24	2:49	"																176.
	1:31	2:71	"									60		53 50	75				180.
	1:43	2:83	"																180.7
	1:48	2:88	"												57.7 50				188.
	1:52	2:92	"	120	126.5	124.2		117.5		124.7		126		132		127		815	Temps
												✓							

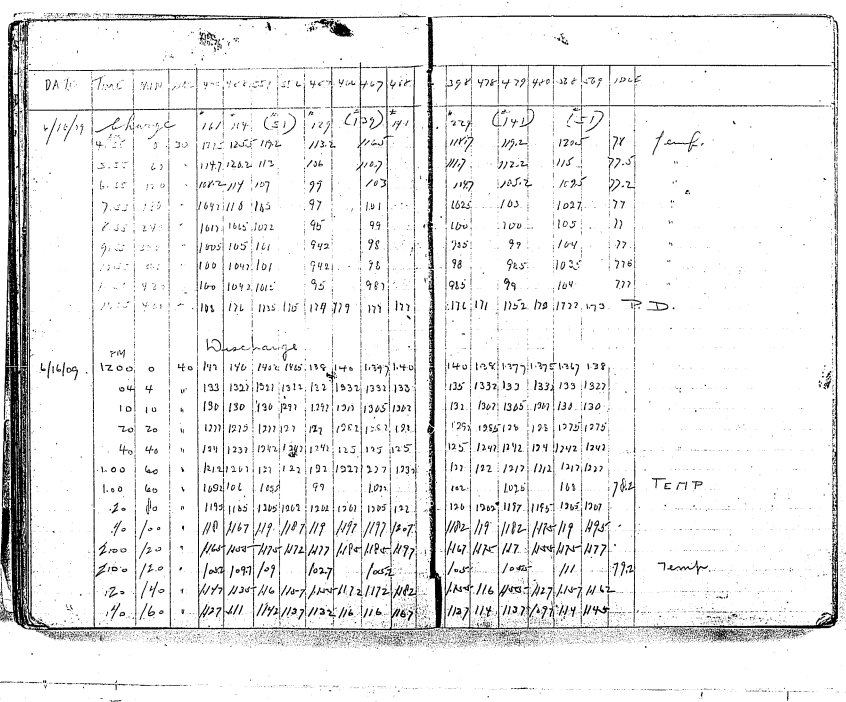


DATE	TIME	MIN	AMPS	484	485	551	552	482	466	467	468	476	478	479	480	568	569	TEMP Probe	
6/15/09	AM			129	112	(39)		127	(137)	1235		112	(129)			(39)			
	4:22	0	30	121.7	126	120		115		1235		119	122.5		124		115		Temp
	5:22	60	"	121	123	119.2		110		1167		111.5	115.5		115.5		82		"
	6:22	120	"	114.5	117	113.5		107		1123		109.5	111.7		113		82		"
	7:22	180	"	110.5	113	109.2		102		1085		107	109		112		217		"
	8:22	240	"	107	1115	1025		992		1047		1045	1042		1095		81		"
	9:22	300	"	1095	103	1037		99		1012		1025	103		103		80		"
	10:22	360	"	103	107	105		99		1012		102	1015		1072		202		"
	11:22	420	"	1023	107	105		93		102		1027	102		103				"
	11:31	429	"	117	1123	112		1091		1121		115	1172		1172		79		C.D
		PM		Discharge															
6/15/09	12:00	0	40	1931	1917	1913	1915	191		1927	142	195	1902	190	189	139	1125		
	06	6	"	133	133	133	1321	133		1327	132	134	133	133	133	1312	132		
	10	10	"	132	132	1317	131	131		132	1313	133	132	132	132	1315	137		
	20	20	"	1295	128	128	128	128		1283	128	1297	1295	128	128	128	128		
	46	40	"	1243	124	1295	1291	122		1255	1255	1251	1247	1245	125	1295	1295		
	1:00	60	"	1212	121	1222	1222	120		125	1233	1222	1221	1221	1215	1233	1225		
	1:30	90	"	1172	1165	109		103		1067		1055	1062		111		209		Temp
	2:00	120	"	1197	1185	1205	1202	1207	121	1212	122	120	1207	120	1195	1208	1207		
	2:30	150	"	118	1172	1192	119	1176	120	120	1247	1186	1196	1184	1177	119	1174		
	3:00	180	"	117	1157	1176	1167	1177	1169	1197		117	1177	117	1157	117	1177		
	3:30	210	"	1091	1132	112		1065		1097		108	1085		1127		81		Temp
	4:00	240	"	115	1142	116	116	1161	1177	1185		116	116	114	116	1165			
	4:30	270	"	1130	1154	1172	114	11265	116	1162	1172	114	1172	114	1107	1172	114		

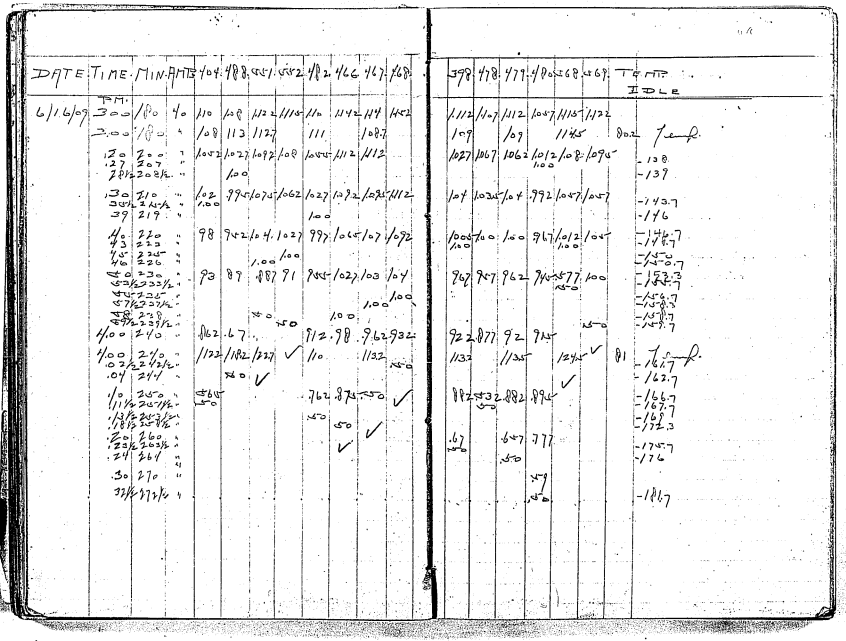
DATE	TIME	MIN	AMPS	464	488	551	552	482	466	467	468	398	478	479	480	568	569	TEMP Rec	
6/15/07	2:17																		
	3:00	180	140	1.062	1.132	1.117	1.102	1.142	1.146	1.152		1.117	1.115	1.114	1.107	1.112	1.113		
	3:00	180	"	.117	.116	.116		.109		.122		.114		.121		.118		82	Temp
	120	300	"	.162	.104	.110	.078	.062	.117	.122	.1134	.077	.077	.077	.103	.078	.102		
	13:0	210	"	.035	.006	.108	.074	.023	.097	.106	.117	.052	.052	.052	.007	.078	.086		
	13:15	2:15	"		.100														141
	13:5	2:12	"												.100				141.3
	1:0	220	"	.100	.97	.087	.068	.027	.077	.109	.110	.024	.027	.022	.988	.044	.067		146.7
	1:07½	22:1½	"					.100											149.7
	1:17	22:7	"												.100				151.3
	1:47	22:37½	"													.100			161.7
	1:48	22:6	"																152.
	1:47½	22:37½	"			.100													153.
	1:59	230	"	.984	.974	.98	.100	.97	.104	.106	.1082	.987	.97	.982	.962	.980	.102		153.3
	1:54	23:4	"								.100						.100		156.
	2:0½	23:1½	"													.50			158.3
	4:0	240	"	.90	.747	.62	.665	.934	.100	.0442	.842	.947	.974	.9465	.942		.74		160
	4:00	240	"	.062	.242	.247		.113		.119		.117		.1174		.1277		83	Temp
	02	2:12	"			.50				.100									161.3
	2:1½	23:4½	"		.50		.50				.50					✓	.50		163.
	02	23:52	"																163.7
	1:0	250	"	.72	✓	✓		.847	.905	.81		.90	.717	.902	.907		✓		166.7
	1:3½	2:3:3½	"	.60															169.
	1:5½	2:5:4	"							.50		.50							169.3
	1:5½	2:6:8½	"					.50			✓								171.
	2:0	260	"						.50			.72		.715	.922				173.3
	2:6	266	"									.50		.50					177.3
	12:1½	2:61½	"																178.3
	13:0	270	"						✓	✓					.684				
	37	277	"									✓			.50				184.7

DATE	TIME	FLOW	#404	#488	#481	#442	#482	#466	#467	#468	#398	#478	#479	#480	#568	#567	TEMP. PROBE
6/15/09	Thr. Recharge		#60	#13	(60)	#28	#23	#8	#10		#223	#70	(60)				
	4:55	0	/202	/29	/247	/18		/20			/2455	/247	/26				#81 TEMP
	5:55	60	/2.14	/26	/202	/14		/174			/20	/20	/214				#37 "
	6:55	/20	/16.4	/2.2	/14	/10		/13			/14	/147	/177				#36 "
	7:55	/80	/13	/18	/13	/07		/10			/112	/112	/14				#3 "
	8:55	240	/102	/14	/107	/04		/08			/084	/084	/13				#3 "
	9:55	300	/09	/122	/09	/032		/06			/062	/062	/10				#2 "
	10:55	360	/064	/107	/08	/02		/04			/045	/045	/10				#1 "
	11:55	420	136	109	137	131		134			134	134	109				#20 "
	11:55	420	177	175	172	174	172	172	174	172	1777	171	175	173	171	1722	P.D.
6/16/09	AM. Discharge																
	12:00	0	140	148	142	141	141	142	142	142	142	139	132	132	132	132	
	.04	4	"	133	132	132	131	132	132	133	132	132	132	132	132	132	
	.10	10	"	131	130	130	130	131	131	131	132	132	131	131	132	1322	
	.20	20	"	126	128	127	127	129	128	128	130	128	128	128	128	128	
	.40	40	"	124	124	124	124	124	125	125	125	125	125	125	125	125	
	1.00	60	"	122	121	122	122	123	123	123	122	122	122	121	122	123	
	1.00	60	"	119	118	122	120	107			106	107		111			#0 Temp
	.20	80	"	119	119	123	120	120	121	121	122	120	120	120	119	120	
	.40	100	"	118	117	119	119	119	121	121	121	119	119	119	119	119	
	2.00	120	"	117	116	117	117	118	119	119	120	117	117	117	116	116	
	2.00	120	"	107	113	112		104			108				1147	797	Temp
	120	140	"	115	117	116	116	117	117	117	118	116	116	114	116	116	
	.40	160	"	113	117	114	112	113	116	116	117	116	116	116	116	116	





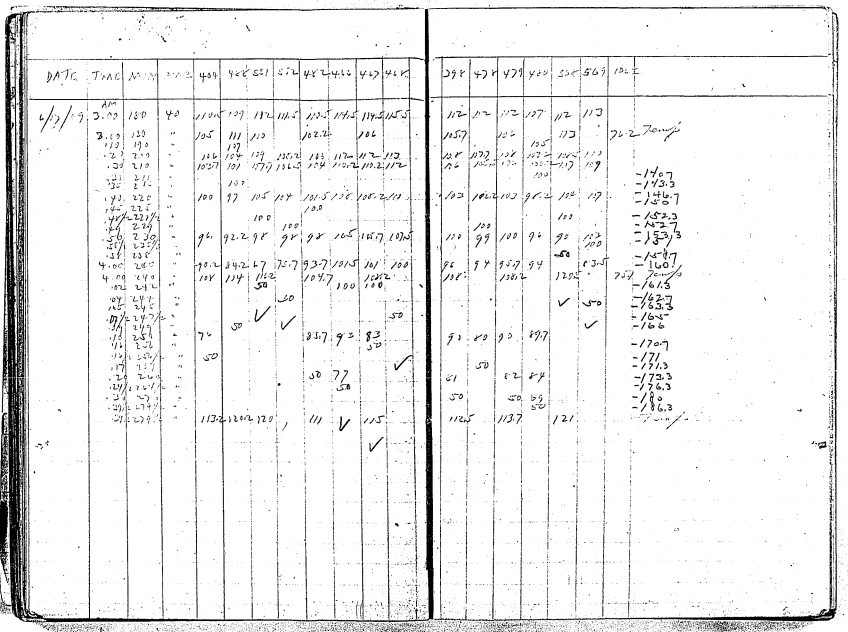
| DATE | TIME | MIN | | |



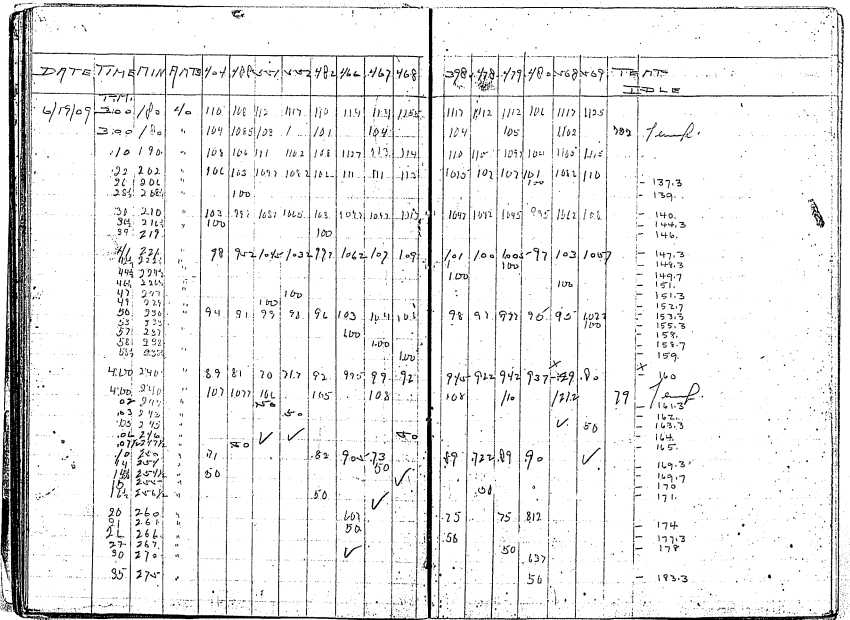
DATE | TIME | MIN. AMTS | 704 | 488 | 647 | 652 | 482 | 466 | 467 | 468 | 398 | 478 | 477 | 480 | 568 | 469 | TEMP. IDLE

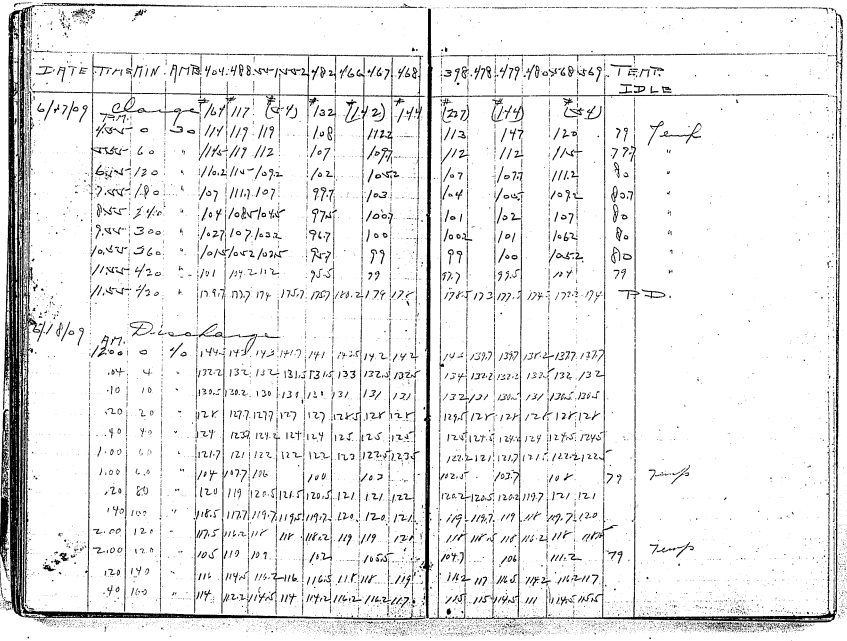
6/16/09 3:00 PM 40 110 108 112 1115 110 1142 114 1152 1112 1107 1112 1047 1115 1132
2:00 " 40 108 113 1127 111 108.7 107 109 1145 802 Temp.
20 200 " 1027 1092 108 1045 1112 1112 1027 1067 1062 1012 1008 1094 138
27 207 " 100 100 137
28½ 208½ "
30 210 " 102 994 1074 1062 1027 1032 1021 1112 104 1034 104 992 1047 1057 143.7
2:30 214½ " 1.00 100 146
37 217 "
40 220 " 98 942 1041 1027 997 1045 107 1072 1005 100 100 967 1012 1047 147.7
43 223 " 100 100 147.7
45 225 " 1.00 100 145.0
46 226 " 145.7
4:00 230 " 93 89 888 91 885 1027 103 104 967 967 962 977 100 152.3
03½ 233½ " 1.00 100 152.7
05 235 " 153.7
07½ 237½ " 1.00 153.7
08 238 " 100 153.7
09½ 239½ " 153.7
4:00 2:10 " 862 67 812.98 962 932 922 877 92 945 81 Temp.
1:00 2:10 " 1122 1182 1227 110 1132 1132 1135 1215 161.7
02½ 212½ " 162.7
04 214 "
1:00 2:50 " 762 874 166.7
11½ 251½ " 167.7
13½ 253½ " 882 882 884 168.7
15½ 255½ " 172.3
21 2:00 "
23½ 203½ " 67 67 777 175.7
24 204 " 176
30 2:10 "
33½ 213½ " 181.7

DATE	TIME	MIN	AMB	404	488	447	482	462	466	467	468	398	478	479	480	481	469	TEMP IDLE	
6/16/09	P.M.	Discharge		162	155	(152)		130	(140)	142		124	(142)		(132)				
	7:55	0	30	117	124	122		113		118		117		112		122		81	Pump.
	6:55	60	"	117	122	116		108		112		114		117		117		80	"
	6:55	120	"	114	116	110		103		106		107		107		112		80	"
	7:55	180	"	119	122	112		100		103		104		105		109		79	"
	8:55	240	"	107	108	105		98.7		102		102		103		102		79	"
	9:55	300	"	103	107	103		98		101		102		102		101		79	"
	10:55	360	"	102	105	103		97.5		101		101		101		101		78.7	"
	11:55	420	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	480	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	540	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	600	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	660	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	720	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	780	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	840	"	102	105	103		97.5		101		101		101		101		78	"
	7:55	900	"	102	105	103		97.5		101		101		101		101		78	"
	8:55	960	"	102	105	103		97.5		101		101		101		101		78	"
	9:55	1020	"	102	105	103		97.5		101		101		101		101		78	"
	10:55	1080	"	102	105	103		97.5		101		101		101		101		78	"
	11:55	1140	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	1200	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	1260	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	1320	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	1380	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	1440	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	1500	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	1560	"	102	105	103		97.5		101		101		101		101		78	"
	7:55	1620	"	102	105	103		97.5		101		101		101		101		78	"
	8:55	1680	"	102	105	103		97.5		101		101		101		101		78	"
	9:55	1740	"	102	105	103		97.5		101		101		101		101		78	"
	10:55	1800	"	102	105	103		97.5		101		101		101		101		78	"
	11:55	1860	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	1920	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	1980	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	2040	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	2100	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	2160	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	2220	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	2280	"	102	105	103		97.5		101		101		101		101		78	"
	7:55	2340	"	102	105	103		97.5		101		101		101		101		78	"
	8:55	2400	"	102	105	103		97.5		101		101		101		101		78	"
	9:55	2460	"	102	105	103		97.5		101		101		101		101		78	"
	10:55	2520	"	102	105	103		97.5		101		101		101		101		78	"
	11:55	2580	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	2640	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	2700	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	2760	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	2820	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	2880	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	2940	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	3000	"	102	105	103		97.5		101		101		101		101		78	"
	7:55	3060	"	102	105	103		97.5		101		101		101		101		78	"
	8:55	3120	"	102	105	103		97.5		101		101		101		101		78	"
	9:55	3180	"	102	105	103		97.5		101		101		101		101		78	"
	10:55	3240	"	102	105	103		97.5		101		101		101		101		78	"
	11:55	3300	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	3360	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	3420	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	3480	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	3540	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	3600	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	3660	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	3720	"	102	105	103		97.5		101		101		101		101		78	"
	7:55	3780	"	102	105	103		97.5		101		101		101		101		78	"
	8:55	3840	"	102	105	103		97.5		101		101		101		101		78	"
	9:55	3900	"	102	105	103		97.5		101		101		101		101		78	"
	10:55	3960	"	102	105	103		97.5		101		101		101		101		78	"
	11:55	4020	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	4080	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	4140	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	4200	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	4260	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	4320	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	4380	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	4440	"	102	105	103		97.5		101		101		101		101		78	"
	7:55	4500	"	102	105	103		97.5		101		101		101		101		78	"
	8:55	4560	"	102	105	103		97.5		101		101		101		101		78	"
	9:55	4620	"	102	105	103		97.5		101		101		101		101		78	"
	10:55	4680	"	102	105	103		97.5		101		101		101		101		78	"
	11:55	4740	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	4800	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	4860	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	4920	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	4980	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	5040	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	5100	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	5160	"	102	105	103		97.5		101		101		101		101		78	"
	7:55	5220	"	102	105	103		97.5		101		101		101		101		78	"
	8:55	5280	"	102	105	103		97.5		101		101		101		101		78	"
	9:55	5340	"	102	105	103		97.5		101		101		101		101		78	"
	10:55	5400	"	102	105	103		97.5		101		101		101		101		78	"
	11:55	5460	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	5520	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	5580	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	5640	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	5700	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	5760	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	5820	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	5880	"	102	105	103		97.5		101		101		101		101		78	"
	7:55	5940	"	102	105	103		97.5		101		101		101		101		78	"
	8:55	6000	"	102	105	103		97.5		101		101		101		101		78	"
	9:55	6060	"	102	105	103		97.5		101		101		101		101		78	"
	10:55	6120	"	102	105	103		97.5		101		101		101		101		78	"
	11:55	6180	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	6240	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	6300	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	6360	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	6420	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	6480	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	6540	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	6600	"	102	105	103		97.5		101		101		101		101		78	"
	7:55	6660	"	102	105	103		97.5		101		101		101		101		78	"
	8:55	6720	"	102	105	103		97.5		101		101		101		101		78	"
	9:55	6780	"	102	105	103		97.5		101		101		101		101		78	"
	10:55	6840	"	102	105	103		97.5		101		101		101		101		78	"
	11:55	6900	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	6960	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	7020	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	7080	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	7140	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	7200	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	7260	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	7320	"	102	105	103		97.5		101		101		101		101		78	"
	7:55	7380	"	102	105	103		97.5		101		101		101		101		78	"
	8:55	7440	"	102	105	103		97.5		101		101		101		101		78	"
	9:55	7500	"	102	105	103		97.5		101		101		101		101		78	"
	10:55	7560	"	102	105	103		97.5		101		101		101		101		78	"
	11:55	7620	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	7680	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	7740	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	7800	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	7860	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	7920	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	7980	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	8040	"	102	105	103		97.5		101		101		101		101		78	"
	7:55	8100	"	102	105	103		97.5		101		101		101		101		78	"
	8:55	8160	"	102	105	103		97.5		101		101		101		101		78	"
	9:55	8220	"	102	105	103		97.5		101		101		101		101		78	"
	10:55	8280	"	102	105	103		97.5		101		101		101		101		78	"
	11:55	8340	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	8400	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	8460	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	8520	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	8580	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	8640	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	8700	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	8760	"	102	105	103		97.5		101		101		101		101		78	"
	7:55	8820	"	102	105	103		97.5		101		101		101		101		78	"
	8:55	8880	"	102	105	103		97.5		101		101		101		101		78	"
	9:55	8940	"	102	105	103		97.5		101		101		101		101		78	"
	10:55	9000	"	102	105	103		97.5		101		101		101		101		78	"
	11:55	9060	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	9120	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	9180	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	9240	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	9300	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	9360	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	9420	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	9480	"	102	105	103		97.5		101		101		101		101		78	"
	7:55	9540	"	102	105	103		97.5		101		101		101		101		78	"
	8:55	9600	"	102	105	103		97.5		101		101		101		101		78	"
	9:55	9660	"	102	105	103		97.5		101		101		101		101		78	"
	10:55	9720	"	102	105	103		97.5		101		101		101		101		78	"
	11:55	9780	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	9840	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	9900	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	9960	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	10020	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	10080	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	10140	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	10200	"	102	105	103		97.5		101		101		101		101		78	"
	7:55	10260	"	102	105	103		97.5		101		101		101		101		78	"
	8:55	10320	"	102	105	103		97.5		101		101		101		101		78	"
	9:55	10380	"	102	105	103		97.5		101		101		101		101		78	"
	10:55	10440	"	102	105	103		97.5		101		101		101		101		78	"
	11:55	10500	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	10560	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	10620	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	10680	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	10740	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	10800	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	10860	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	10920	"	102	105	103		97.5		101		101		101		101		78	"
	7:55	10980	"	102	105	103		97.5		101		101		101		101		78	"
	8:55	11040	"	102	105	103		97.5		101		101		101		101		78	"
	9:55	11100	"	102	105	103		97.5		101		101		101		101		78	"
	10:55	11160	"	102	105	103		97.5		101		101		101		101		78	"
	11:55	11220	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	11280	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	11340	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	11400	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	11460	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	11520	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	11580	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	11640	"	102	105	103		97.5		101		101		101		101		78	"
	7:55	11700	"	102	105	103		97.5		101		101		101		101		78	"
	8:55	11760	"	102	105	103		97.5		101		101		101		101		78	"
	9:55	11820	"	102	105	103		97.5		101		101		101		101		78	"
	10:55	11880	"	102	105	103		97.5		101		101		101		101		78	"
	11:55	11940	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	12000	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	12060	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	12120	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	12180	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	12240	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	12300	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	12360	"	102	105	103		97.5		101		101		101		101		78	"
	7:55	12420	"	102	105	103		97.5		101		101		101		101		78	"
	8:55	12480	"	102	105	103		97.5		101		101		101		101		78	"
	9:55	12540	"	102	105	103		97.5		101		101		101		101		78	"
	10:55	12600	"	102	105	103		97.5		101		101		101		101		78	"
	11:55	12660	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	12720	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	12780	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	12840	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	12900	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	12960	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	13020	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	13080	"	102	105	103		97.5		101		101		101		101		78	"
	7:55	13140	"	102	105	103		97.5		101		101		101		101		78	"
	8:55	13200	"	102	105	103		97.5		101		101		101		101		78	"
	9:55	13260	"	102	105	103		97.5		101		101		101		101		78	"
	10:55	13320	"	102	105	103		97.5		101		101		101		101		78	"
	11:55	13380	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	13440	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	13500	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	13560	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	13620	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	13680	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	13740	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	13800	"	102	105	103		97.5		101		101		101		101		78	"
	7:55	13860	"	102	105	103		97.5		101		101		101		101		78	"
	8:55	13920	"	102	105	103		97.5		101		101		101		101		78	"
	9:55	13980	"	102	105	103		97.5		101		101		101		101		78	"
	10:55	14040	"	102	105	103		97.5		101		101		101		101		78	"
	11:55	14100	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	14160	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	14220	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	14280	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	14340	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	14400	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	14460	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	14520	"	102	105	103		97.5		101		101		101		101		78	"
	7:55	14580	"	102	105	103		97.5		101		101		101		101		78	"
	8:55	14640	"	102	105	103		97.5		101		101		101		101		78	"
	9:55	14700	"	102	105	103		97.5		101		101		101		101		78	"
	10:55	14760	"	102	105	103		97.5		101		101		101		101		78	"
	11:55	14820	"	102	105	103		97.5		101		101		101		101		78	"
	12:55	14880	"	102	105	103		97.5		101		101		101		101		78	"
	1:55	14940	"	102	105	103		97.5		101		101		101		101		78	"
	2:55	15000	"	102	105	103		97.5		101		101		101		101		78	"
	3:55	15060	"	102	105	103		97.5		101		101		101		101		78	"
	4:55	15120	"	102	105	103		97.5		101		101		101		101		78	"
	5:55	15180	"	102	105	103		97.5		101		101		101		101		78	"
	6:55	15240	"	102	105	103		97.5		101		101		101		101		78	"
	7:55

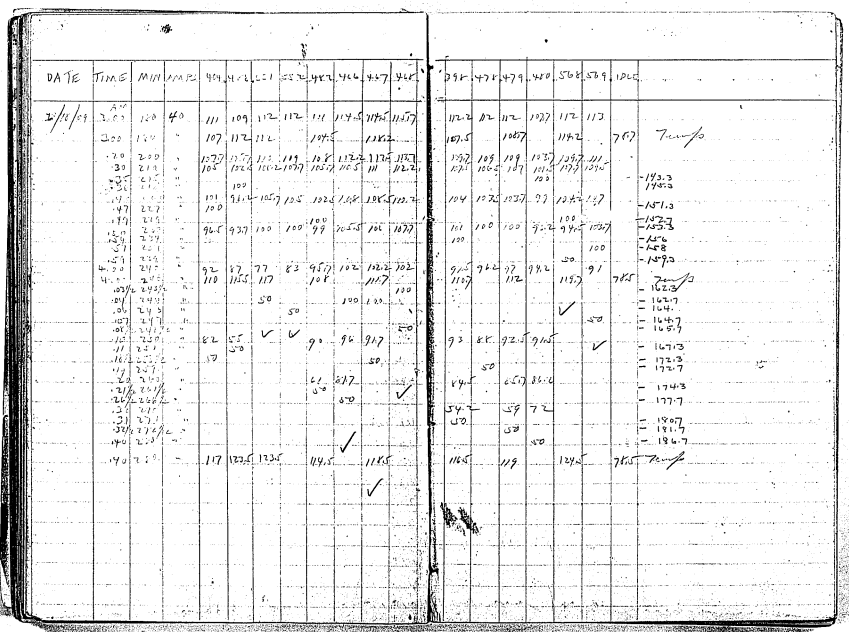


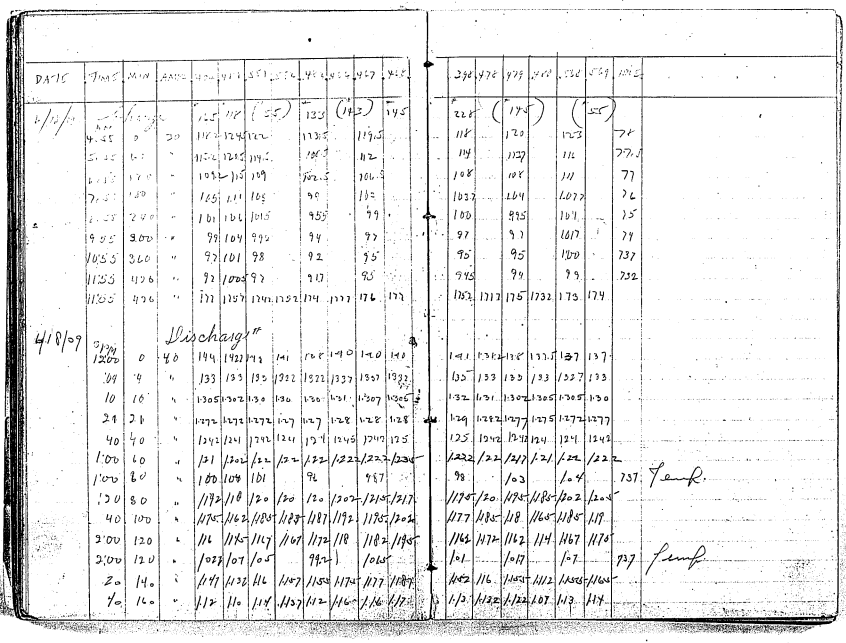
| DATE | TIME | MIN | AMB | #4 | #3 | #2 | #1 | #8 | #6 | #7 | #5 | #9 | #10 | #11 | #12 | #13 | #14 | #15 | #16 | #17 | #18 | #19 | #20 | #21 | #22 | #23 | #24 | #25 | #26 | #27 | #28 |





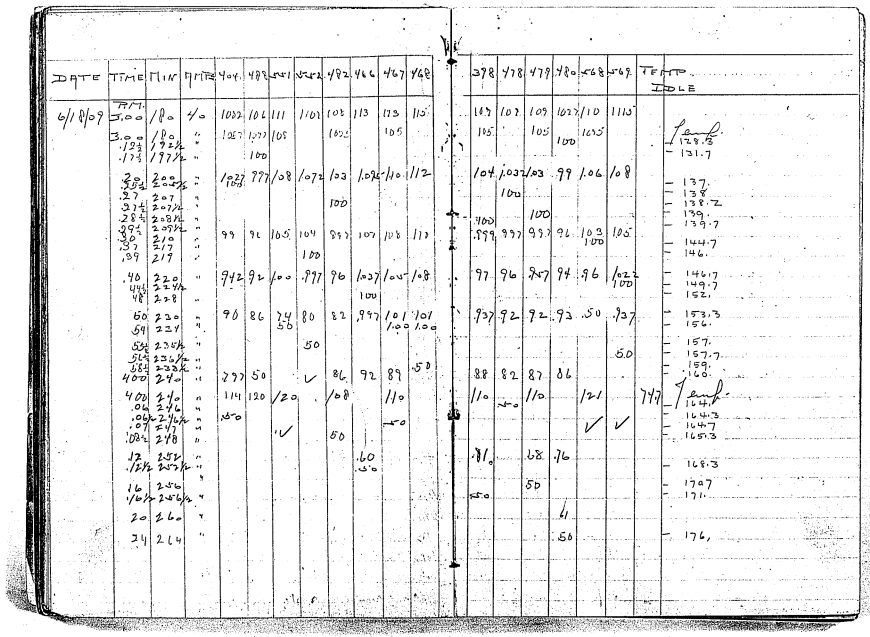
DATE	TIME	MIN.	AIR	404	488	454	482	464	467	468	378	478	479	480	568	567	TEMP. IDLE
6/27/09		change		167	117	(54)	132	(142)	144		(227)	(144)	(54)				
	7AM	0	30	114	119	119	108	122			113	147	120		79		Temp
		60	"	114	119	112	107	098			112	112	114		777		"
	6AM	120	"	1102	114	092	102	0952			107	077	1112		80		"
	7AM	180	"	107	1111	107	997	103			104	095	092		80.7		"
	8AM	240	"	104	108	095	975	097			101	102	107		80		"
	9AM	300	"	1027	107	092	967	100			1002	101	1062		80		"
	10AM	360	"	104	095	092	947	99			99	100	0952		80		"
	11AM	420	"	101	117	112	955	99			977	995	104		79		"
	12AM	480	"	1197	1117	114	1137	1187	1182	179	1175	1172	1177	174	1172	174	T+D.
7/1/09	8AM	Discharge															
	1200	0	1/0	144	149	143	141	1425	142		144	1397	1397	135	1377	1377	
		04	4	"	132	132	132	1315	133	1322	1325		134	1322	1322	132	132	132	
		10	10	"	1305	1302	130	131	131	131	131		132	131	1305	131	1305	1305	
		20	20	"	128	1277	1277	127	127	1275	128	128	1295	127	127	127	127	127	
		40	40	"	124	1238	123.2	124	124	125	125	125	125	1245	1245	124	1245	1245	
		1:00	60	"	121.7	121	122	122	122	123	1225	1225	122	121	121.7	121.5	122.2	122	
		1:00	60	"	124	1277	126		100	102			122.5	121	121.7	121.5	122.2	122	
		1:20	80	"	120	119	120.5	121.5	120.5	121	121	122	120.2	120.5	120.2	119.7	121	121	
		1:40	100	"	118.5	1177	119.7	119.5	119.2	120	120	121	119	119.7	119	118	119.7	120	
		2:00	120	"	117.5	116.2	118	118	118.2	119	119	120	118	118	118.5	118.2	118	118.5	
		2:00	120	"	105	119	109		102		1055		104.7	106		111.2	79	Temp	
		120	140	"	115	114.5	115.2	116	116.5	115	118	119	114	117	116.5	114.2	117		
		140	160	"	114	122.2	114.5	114	114.2	116.2	116.2	117.2	115	115	114.5	111	115.5	115.5	





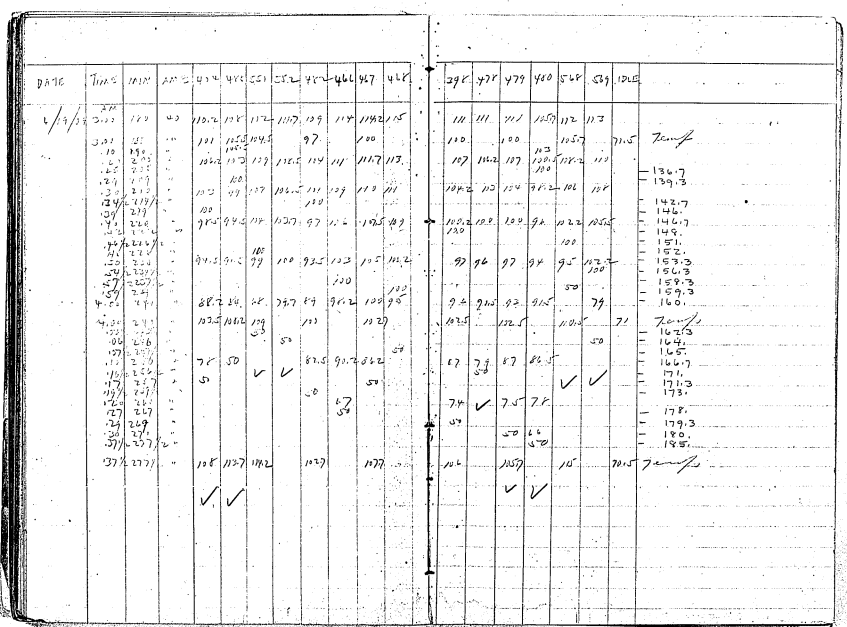
4/8/09

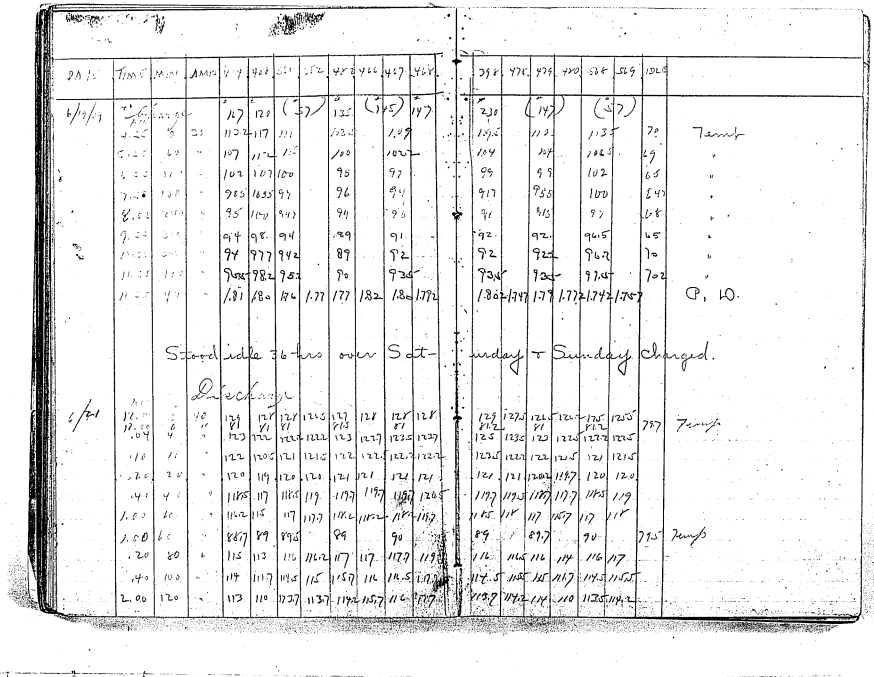
Discharge



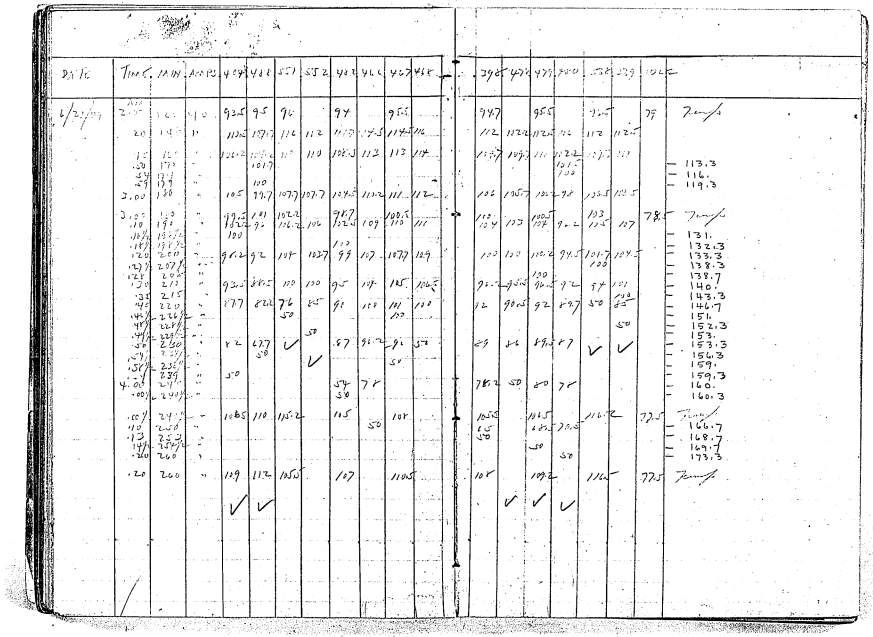
DATE	TIME	PSI	PITCH	404	483	1441	1442	482	466	467	484	378	478	479	480	568	567	TEMP IDLE
6/18/09	PM																	
	3.00	180	1/0	1032	104	111	1101	102	113	113	115	107	102	109	1027	110	1115	
	3.00	180	"	1057	1077	105		1052		109		105		105	100	1035		Tank 128.3
	.17½	192½	"															
	.17½	177½	"		100													131.7
	20	200	"															
	20½	200½	"	1027	997	108	1072	103	1092	110	112		1037	103	99	106	108	
	.27	207	"	1057									100					137.
	.27½	207½	"					100										138.
	.28½	208½	"															138.2
	29½	209½	"										100					139.
	30	210	"		99	96	105	104	993	107	108	113						139.7
	.30	210	"										997	997	97	103	105	
	.30	217	"													100		144.7
	.39	219	"					100										146.
	.40	220	"		942	96	100	997	96	1037	1095	108						
	40½	220½	"										97	96	947	94	96	1022
	48	228	"						100									100
	50	220	"		90	86	24	80	82	997	101	101						146.7
	50	227	"				50				100	100						149.7
	52½	230½	"					50										152.
	52½	230½	"										937	92	92	93	50	153.3
	58½	236½	"															156.
	58½	236½	"															157.
	400	240	"	997	50		✓	86	92	89	50						50	157.7
	400	240	"	114	120	120		108		110								159.
	.00	240	"										88	82	87	86		160.
	.00	240	"	50						50								
	.07	247½	"										110	70	110		121	147 Tank
	.08½	248	"			✓		50										164.3
	12	252	"						60							✓	✓	164.7
	.12½	252½	"						50									165.3
	16	256	"										81	68	76			168.3
	.16½	256½	"															
	20	260	"										50	50				170.7
																		171.
	24	264	"												41			
															56			176.

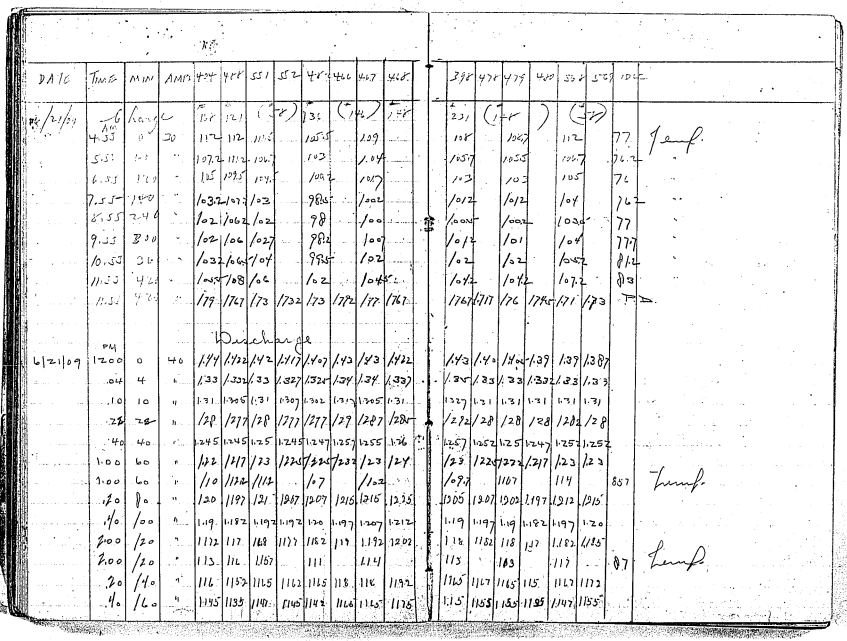
DATE	TIME	MIN	RATE	404	481	482	483	466	467	468	398	478	477	480	468	469	TEMP
																	IDLE
6/18/09		Recharge		166	119	(46)		134	(144)	146	229		(146)		(56)		
	4:45	0	30	122	119	124		107		117	107		104		114		74 Temp.
	5:15	60	"	113	112	111		107		106	110		107		111		74 "
	6:15	120	"	108	114	108		102		102	104		106		108		76 "
	7:15	180	"	102	110	104		99		102	102		103		106		76 "
	8:15	240	"	102	107	102		97		99	100		100		102		74 "
	9:15	300	"	100	104	100		94		97	98		98		103		76 "
	10:15	360	"	98	102	99		93		96	97		97		101		74 "
	11:15	420	"	96	101.5	98.5		92.5		94.5	96.5		96.5		101		73 "
	11:45	450	"	140	178.2	175		176.5	175.5	181	179	179	179	173.7	178.2	176.2	173 125 TOD.
6/19/09	AM.		Discharge														
	12:00	0	450	144	145	142.6	141	140.2	143	142	142		142.5	139	139	138	137.7	137.7	
	:04	4	"	133	132.5	132.2	132	132	133.5	133.5	133		133	133	133	133	132.5	132.2	
	:10	10	"	130.5	130.2	130.2	129.7	129.7	131	131	130.5		132	130.5	130.5	130.5	130.5	130.2	
	:20	20	"	128	127.7	128	127	127	128.2	128.2	128		129	128	128	128	128	128	
	:49	49	"	124	126	124.5	124	124	125	125	124		125	124.5	124.2	124	123.5	123.5	
	1:00	60	"	121.7	121	122.2	122	122	122.5	122.5	122.5		122	122	122	122.5	122.5	122.5	
	1:00	60	"	120	120.5	120.5		95		94.5			94		94.5		103	127	Temp
	:20	80	"	120	119	121	120.2	120.2	121	121	121.2		120	120.2	120	119	121	121	
	:40	100	"	118	117	119	119	118.5	119.5	120	120.5		118.2	118.2	118.2	118.2	119.7	120	
	2:00	120	"	117	116.7	117.7	117	117.5	119	120			117	117	117	116.7	117	116.2	
	2:00	120	"	110	109.5	109		95.7		96.7			96.2		99		105	72	Temp
	:20	140	"	115.5	114	116	116	115.5	117.5	117	118.2		115.2	114	116	113	116	117	
	:40	160	"	113	111	114	113.7	113.2	115.7	115	117		113.2	114	114	113.7	114	115	



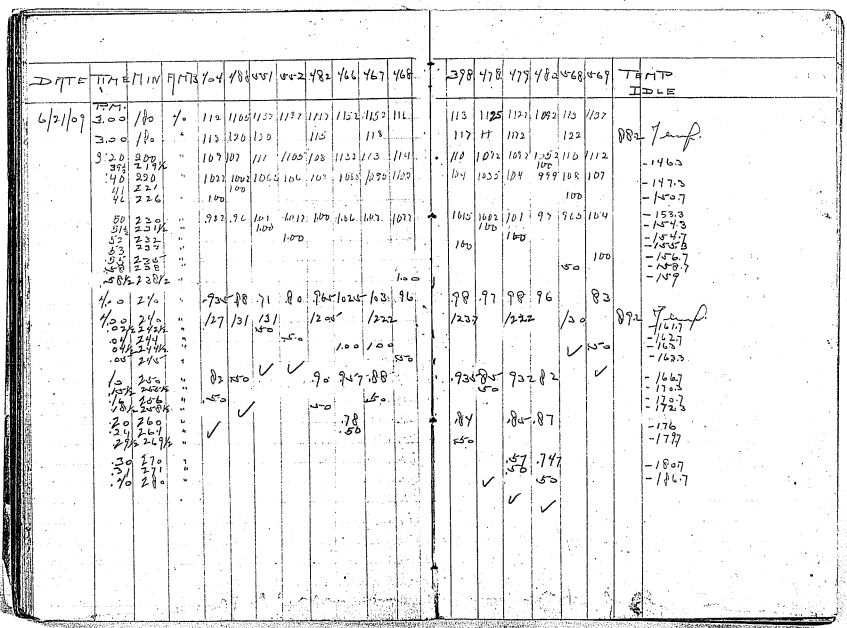


Steadicle 36-hrs over Sat-urday + Sunday charged.

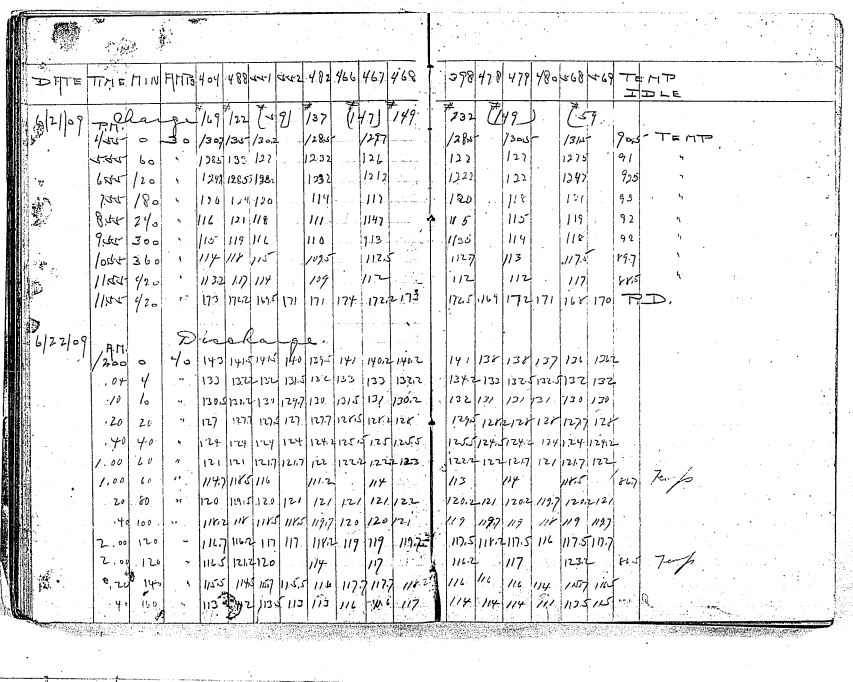




| DATE | TIME | MIN | AMP | 34A | 34B | 33S | 32S | 34B | 34A | 33A | 33B | 32A | 32B | 32C | 32D | 32E | 32F | 32G | 32H | 32I | 32J | 32K | 32L | 32M | 32N | 32O | 32P | 32Q | 32R | 32S | 32T | 32U | 32V | 32W | 32X | 32Y | 32Z | 33A | 33B | 33C | 33D | 33E | 33F | 33G | 33H | 33I | 33J | 33K | 33L | 33M | 33N | 33O | 33P | 33Q | 33R | 33S | 33T | 33U | 33V | 33W | 33X | 33Y | 33Z | 34A | 34B | 34C | 34D | 34E | 34F | 34G | 34H | 34I | 34J | 34K | 34L | 34M | 34N | 34O | 34P | 34Q | 34R | 34S | 34T | 34U | 34V | 34W | 34X | 34Y | 34Z | 35A | 35B | 35C | 35D | 35E | 35F | 35G | 35H | 35I | 35J | 35K | 35L | 35M | 35N | 35O | 35P | 35Q | 35R | 35S | 35T | 35U | 35V | 35W | 35X | 35Y | 35Z | 36A | 36B | 36C | 36D | 36E | 36F | 36G | 36H | 36I | 36J | 36K | 36L | 36M | 36N | 36O | 36P | 36Q | 36R | 36S | 36T | 36U | 36V | 36W | 36X | 36Y | 36Z | 37A | 37B | 37C | 37D | 37E | 37F | 37G | 37H | 37I | 37J | 37K | 37L | 37M | 37N | 37O | 37P | 37Q | 37R | 37S | 37T | 37U | 37V | 37W | 37X | 37Y | 37Z | 38A | 38B | 38C | 38D | 38E | 38F | 38G | 38H | 38I | 38J | 38K | 38L | 38M | 38N | 38O | 38P | 38Q | 38R | 38S | 38T | 38U | 38V | 38W | 38X | 38Y | 38Z | 39A | 39B | 39C | 39D | 39E | 39F | 39G | 39H | 39I | 39J | 39K | 39L | 39M | 39N | 39O | 39P | 39Q | 39R | 39S | 39T | 39U | 39V | 39W | 39X | 39Y | 39Z | 40A | 40B | 40C | 40D | 40E | 40F | 40G | 40H | 40I | 40J | 40K | 40L | 40M | 40N | 40O | 40P | 40Q | 40R | 40S | 40T | 40U | 40V | 40W | 40X | 40Y | 40Z | 41A | 41B | 41C | 41D | 41E | 41F | 41G | 41H | 41I | 41J | 41K | 41L | 41M | 41N | 41O | 41P | 41Q | 41R | 41S | 41T | 41U | 41V | 41W | 41X | 41Y | 41Z | 42A | 42B | 42C | 42D | 42E | 42F | 42G | 42H | 42I | 42J | 42K | 42L | 42M | 42N | 42O | 42P | 42Q | 42R | 42S | 42T | 42U | 42V | 42W | 42X | 42Y | 42Z | 43A | 43B | 43C | 43D | 43E | 43F | 43G | 43H | 43I | 43J | 43K | 43L | 43M | 43N | 43O | 43P | 43Q | 43R | 43S | 43T | 43U | 43V | 43W | 43X | 43Y | 43Z | 44A | 44B | 44C | 44D | 44E | 44F | 44G | 44H | 44I | 44J | 44K | 44L | 44M | 44N | 44O | 44P | 44Q | 44R | 44S | 44T | 44U | 44V | 44W | 44X | 44Y | 44Z | 45A | 45B | 45C | 45D | 45E | 45F | 45G | 45H | 45I | 45J | 45K | 45L | 45M | 45N | 45O | 45P | 45Q | 45R | 45S | 45T | 45U | 45V | 45W | 45X | 45Y | 45Z | 46A | 46B | 46C | 46D | 46E | 46F | 46G | 46H | 46I | 46J | 46K | 46L | 46M | 46N | 46O | 46P | 46Q | 46R | 46S | 46T | 46U | 46V | 46W | 46X | 46Y | 46Z | 47A | 47B | 47C | 47D | 47E | 47F | 47G | 47H | 47I | 47J | 47K | 47L | 47M | 47N | 47O | 47P | 47Q | 47R | 47S | 47T | 47U | 47V | 47W | 47X | 47Y | 47Z | 48A | 48B | 48C | 48D | 48E | 48F | 48G | 48H | 48I | 48J | 48K | 48L | 48M | 48N | 48O | 48P | 48Q | 48R | 48S | 48T | 48U | 48V | 48W | 48X | 48Y | 48Z | 49A | 49B | 49C | 49D | 49E | 49F | 49G | 49H | 49I | 49J | 49K | 49L | 49M | 49N | 49O | 49P | 49Q | 49R | 49S | 49T | 49U | 49V | 49W | 49X | 49Y | 49Z | 50A | 50B | 50C | 50D | 50E | 50F | 50G | 50H | 50I | 50J | 50K | 50L | 50M | 50N | 50O | 50P | 50Q | 50R | 50S | 50T | 50U | 50V | 50W | 50X | 50Y | 50Z | 51A | 51B | 51C | 51D | 51E | 51F | 51G | 51H | 51I | 51J | 51K | 51L | 51M | 51N | 51O | 51P | 51Q | 51R | 51S | 51T | 51U | 51V | 51W | 51X | 51Y | 51Z | 52A | 52B | 52C | 52D | 52E | 52F | 52G | 52H | 52I | 52J | 52K | 52L | 52M | 52N | 52O | 52P | 52Q | 52R | 52S | 52T | 52U | 52V | 52W | 52X | 52Y | 52Z | 53A | 53B | 53C | 53D | 53E | 53F | 53G | 53H | 53I | 53J | 53K | 53L | 53M | 53N | 53O | 53P | 53Q | 53R | 53S | 53T | 53U | 53V | 53W | 53X | 53Y | 53Z | 54A | 54B | 54C | 54D | 54E | 54F | 54G | 54H | 54I | 54J | 54K | 54L | 54M | 54N | 54O | 54P | 54Q | 54R | 54S | 54T | 54U | 54V | 54W | 54X | 54Y | 54Z | 55A | 55B | 55C | 55D | 55E | 55F | 55G | 55H | 55I | 55J | 55K | 55L | 55M | 55N | 55O | 55P | 55Q | 55R | 55S | 55T | 55U | 55V | 55W | 55X | 55Y | 55Z | 56A | 56B | 56C | 56D | 56E | 56F | 56G | 56H | 56I | 56J | 56K | 56L | 56M | 56N | 56O | 56P | 56Q | 56R | 56S | 56T | 56U | 56V | 56W | 56X | 56Y | 56Z | 57A | 57B | 57C | 57D | 57E | 57F | 57G | 57H | 57I | 57J | 57K | 57L | 57M | 57N | 57O | 57P | 57Q | 57R | 57S | 57T | 57U | 57V | 57W | 57X | 57Y | 57Z | 58A | 58B | 58C | 58D | 58E | 58F | 58G | 58H | 58I | 58J | 58K | 58L | 58M | 58N | 58O | 58P | 58Q | 58R | 58S | 58T | 58U | 58V | 58W | 58X | 58Y | 58Z | 59A | 59B | 59C | 59D | 59E | 59F | 59G | 59H | 59I | 59J | 59K | 59L | 59M | 59N | 59O | 59P | 59Q | 59R | 59S | 59T | 59U | 59V | 59W | 59X | 59Y | 59Z | 60A | 60B | 60C | 60D | 60E | 60F | 60G | 60H | 60I | 60J | 60K | 60L | 60M | 60N | 60O | 60P | 60Q | 60R | 60S | 60T | 60U | 60V | 60W | 60X | 60Y | 60Z | 61A | 61B | 61C | 61D | 61E | 61F | 61G | 61H | 61I | 61J | 61K | 61L | 61M | 61N | 61O | 61P | 61Q | 61R | 61S | 61T | 61U | 61V | 61W | 61X | 61Y | 61Z | 62A | 62B | 62C | 62D | 62E | 62F | 62G | 62H | 62I | 62J | 62K | 62L | 62M | 62N | 62O | 62P | 62Q | 62R | 62S | 62T | 62U | 62V | 62W | 62X | 62Y | 62Z | 63A | 63B | 63C | 63D | 63E | 63F | 63G | 63H | 63I | 63J | 63K | 63L | 63M | 63N | 63O | 63P | 63Q | 63R | 63S | 63T | 63U | 63V | 63W | 63X | 63Y | 63Z | 64A | 64B | 64C | 64D | 64E | 64F | 64G | 64H | 64I | 64J | 64K | 64L | 64M | 64N | 64O | 64P | 64Q | 64R | 64S | 64T | 64U | 64V | 64W | 64X | 64Y | 64Z | 65A | 65B | 65C | 65D | 65E | 65F | 65G | 65H | 65I | 65J | 65K | 65L | 65M | 65N | 65O | 65P | 65Q | 65R | 65S | 65T | 65U | 65V | 65W | 65X | 65Y | 65Z | 66A | 66B | 66C | 66D | 66E | 66F | 66G | 66H | 66I | 66J | 66K | 66L | 66M | 66N | 66O | 66P | 66Q | 66R | 66S | 66T | 66U | 66V | 66W | 66X | 66Y | 66Z | 67A | 67B | 67C | 67D | 67E | 67F | 67G | 67H | 67I | 67J | 67K | 67L | 67M | 67N | 67O | 67P | 67Q | 67R | 67S | 67T | 67U | 67V | 67W | 67X | 67Y | 67Z | 68A | 68B | 68C | 68D | 68E | 68F | 68G | 68H | 68I | 68J | 68K | 68L | 68M | 68N | 68O | 68P | 68Q | 68R | 68S | 68T | 68U | 68V | 68W | 68X | 68Y | 68Z | 69A | 69B | 69C | 69D | 69E | 69F | 69G | 69H | 69I | 69J | 69K | 69L | 69M | 69N | 69O | 69P | 69Q | 69R | 69S | 69T | 69U | 69V | 69W | 69X | 69Y | 69Z | 70A | 70B | 70C | 70D | 70E | 70F | 70G | 70H | 70I | 70J | 70K | 70L | 70M | 70N | 70O | 70P | 70Q | 70R | 70S | 70T | 70U | 70V | 70W | 70X | 70Y | 70Z | 71A | 71B | 71C | 71D | 71E | 71F | 71G | 71H | 71I | 71J | 71K | 71L | 71M | 71N | 71O | 71P | 71Q | 71R | 71S | 71T | 71U | 71V | 71W | 71X | 71Y | 71Z | 72A | 72B | 72C | 72D | 72E | 72F | 72G | 72H | 72I | 72J | 72K | 72L | 72M | 72N | 72O | 72P | 72Q | 72R | 72S | 72T | 72U | 72V | 72W | 72X | 72Y | 72Z | 73A | 73B | 73C | 73D | 73E | 73F | 73G | 73H | 73I | 73J | 73K | 73L | 73M | 73N | 73O | 73P | 73Q | 73R | 73S | 73T | 73U | 73V | 73W | 73X | 73Y | 73Z | 74A | 74B | 74C | 74D | 74E | 74F | 74G | 74H | 74I | 74J | 74K | 74L | 74M | 74N | 74O | 74P | 74Q | 74R | 74S | 74T | 74U | 74V | 74W | 74X | 74Y | 74Z | 75A | 75B | 75C | 75D | 75E | 75F | 75G | 75H | 75I | 75J | 75K | 75L | 75M | 75N | 75O | 75P | 75Q | 75R | 75S | 75T | 75U | 75V | 75W | 75X | 75Y | 75Z | 76A | 76B | 76C | 76D | 76E | 76F | 76G | 76H | 76I | 76J | 76K | 76L | 76M | 76N | 76O | 76P | 76Q | 76R | 76S | 76T | 76U | 76V | 76W | 76X | 76Y | 76Z | 77A | 77B | 77C | 77D | 77E | 77F | 77G | 77H | 77I | 77J | 77K | 77L | 77M | 77N | 77O | 77P | 77Q | 77R | 77S | 77T | 77U | 77V | 77W | 77X | 77Y | 77Z | 78A | 78B | 78C | 78D | 78E | 78F | 78G | 78H | 78I | 78J | 78K | 78L | 78M | 78N | 78O | 78P | 78Q | 78R | 78S | 78T | 78U | 78V | 78W | 78X | 78Y | 78Z | 79A | 79B | 79C | 79D | 79E | 79F | 79G | 79H | 79I | 79J | 79K | 79L | 79M | 79N | 79O | 79P | 79Q | 79R | 79S | 79T | 79U | 79V | 79W | 79X | 79Y | 79Z | 80A | 80B | 80C | 80D | 80E | 80F | 80G | 80H | 80I | 80J | 80K | 80L | 80M | 80N | 80O | 80P | 80Q | 80R | 80S | 80T | 80U | 80V | 80W | 80X | 80Y | 80Z | 81A | 81B | 81C | 81D | 81E | 81F | 81G | 81H | 81I | 81J | 81K | 81L | 81M | 81N | 81O | 81P | 81Q | 81R | 81S | 81T | 81U | 81V | 81W | 81X | 81Y | 81Z | 82A | 82B | 82C | 82D | 82E | 82F | 82G | 82H | 82I | 82J | 82K | 82L | 82M | 82N | 82O | 82P | 82Q | 82R | 82S | 82T | 82U | 82V | 82W | 82X | 82Y | 82Z | 83A | 83B | 83C | 83D | 83E | 83F | 83G | 83H | 83I | 83J | 83K | 83L | 83M | 83N | 83O | 83P | 83Q | 83R | 83S | 83T | 83U | 83V | 83W | 83X | 83Y | 83Z | 84A | 84B | 84C | 84D | 84E | 84F | 84G | 84H | 84I | 84J | 84K | 84L | 84M | 84N | 84O | 84P | 84Q | 84R | 84S | 84T | 84U | 84V | 84W | 84X | 84Y | 84Z | 85A | 85B | 85C | 85D | 85E | 85F | 85G | 85H | 85I | 85J | 85K | 85L | 85M | 85N | 85O | 85P | 85Q | 85R | 85S | 85T | 85U | 85V | 85W | 85X | 85Y | 85Z | 86A | 86B | 86C | 86D | 86E | 86F | 86G | 86H | 86I | 86J | 86K | 86L | 86M | 86N | 86O | 86P | 86Q | 86R | 86S | 86T | 86U | 86V | 86W | 86X | 86Y | 86Z | 87A | 87B | 87C | 87D | 87E | 87F | 87G | 87H | 87I | 87J | 87K | 87L | 87M | 87N | 87O | 87P | 87Q | 87R | 87S | 87T | 87U | 87V | 87W | 87X | 87Y | 87Z | 88A | 88B | 88C | 88D | 88E | 88F | 88G | 88H | 88I | 88J | 88K | 88L | 88M | 88N | 88O | 88P | 88Q | 88R | 88S | 88T | 88U | 88V | 88W | 88X | 88Y | 88Z | 89A | 89B | 89C | 89D | 89E | 89F | 89G | 89H | 89I | 89J | 89K | 89L | 89M | 89N | 89O | 89P | 89Q | 89R | 89S | 89T | 89U | 89V | 89W | 89X | 89Y | 89Z | 90A | 90B | 90C | 90D | 90E | 90F | 90G | 90H | 90I | 90J | 90K | 90L | 90M | 90N | 90O | 90P | 90Q | 90R | 90S | 90T | 90U | 90V | 90W | 90X | 90Y | 90Z | 91A | 91B | 91C | 91D | 91E | 91F | 91G | 91H | 91I | 91J | 91K | 91L | 91M | 91N | 91O | 91P | 91Q | 91R | 91S | 91T | 91U | 91V | 91W | 91X | 91Y | 91Z | 92A | 92B | 92C | 92D | 92E | 92F | 92G | 92H | 92I | 92J | 92K | 92L | 92M | 92N | 92O | 92P | 92Q | 92R | 92S | 92T | 92U | 92V | 92W | 92X | 92Y | 92Z | 93A | 93B | 93C | 93D | 93E | 93F | 93G | 93H | 93I | 93J | 93K | 93L | 93M | 93N | 93O | 93P | 93Q | 93R | 93S | 93T | 93U | 93V | 93W | 93X | 93Y | 93Z | 94A | 94B | 94C | 94D | 94E | 94F | 94G | 94H | 94I | 94J | 94K | 94L | 94M | 94N | 94O | 94P | 94Q | 94R | 94S | 94T | 94U | 94V | 94W | 94X | 94Y | 94Z | 95A | 95B | 95C | 95D | 95E | 95F | 95G | 95H | 95I | 95J | 95K | 95L | 95M | 95N | 95O | 95P | 95Q | 95R | 95S | 95T | 95U | 95V | 95W | 95X | 95Y | 95Z | 96A | 96B | 96C | 96D | 96E | 96F | 96G | 96H | 96I | 96J | 96K | 96L | 96M | 96N | 96O | 96P | 96Q | 96R | 96S | 96T | 96U | 96V | 96W | 96X | 96Y | 96Z | 97A | 97B | 97C | 97D | 97E | 97F | 97G | 97H | 97I | 97J | 97K | 97L | 97M | 97N | 97O | 97P | 97Q | 97R | 97S | 97T | 97U | 97V | 97W | 97X | 97Y | 97Z | 98A | 98B | 98C | 98D | 98E | 98F | 98G | 98H | 98I | 98J | 98K | 98L | 98M | 98N | 98O | 98P | 98Q | 98R | 98S | 98T | 98U | 98V | 98W | 98X | 98Y | 98Z | 99A | 99B | 99C | 99D | 99E | 99F | 99G | 99H | 99I | 99J | 99K | 99L | 99M | 99N | 99O | 99P | 99Q | 99R | 99S | 99T | 99U | 99V | 99W | 99X | 99Y | 99Z | 100A | 100B | 100C | 100D | 100E | 100F | 100G | 100H | 100I | 100J | 100K | 100L | 100M | 100N | 100O | 100P | 100Q | 100R | 100S | 100T | 100U | 100V | 100W | 100X | 100Y | 100Z | 101A | 101B | 101C | 101D | 101E | 101F | 101G | 101H | 101I | 101J | 101K | 101L | 101M | 101N | 101O | 101P | 101Q | 101R | 101S | 101T | 101U | 101V | 101W | 101X | 101Y | 101Z | 102A | 102B | 102C | 102D | 102E | 102F | 102G | 102H | 102I | 102J | 102K | 102L | 102M | 102N | 102O | 102P | 102Q | 102R | 102S | 102T | 102U | 102V | 102W | 102X | 102Y | 102Z | 103A | 103B | 103C | 103D | 103E | 103F | 103G | 103H | 103I | 103J | 103K | 103L | 103M | 103N | 103O | 103P | 103Q | 103R | 103S | 103T | 103U | 103V | 103W | 103X | 103Y | 103Z | 104A | 104B | 104C | 104D | 104E | 104F | 104G | 104H | 104I | 104J | 104K | 104L | 104M | 104N | 104O | 104P | 104Q | 104R | 104S | 104T | 104U | 104V | 104W | 104X | 104Y | 104Z | 105A | 105B | 105C | 105D | 105E | 105F | 105G | 105H | 105I | 105J | 105K | 105L | 105M | 105N | 105O | 105P | 105Q | 105R | 105S | 105T | 105U | 105V | 105W | 105X | 105Y | 105Z | 106A | 106B | 106C | 106D | 106E | 106F | 106G | 106H | 106I | 106J | 106K | 106L | 106M | 106N | 106O | 106P | 106Q | 106R | 106S | 106T | 106U | 106V | 106W | 106X | 106Y | 106Z | 107A | 107B | 107C | 107D | 107E | 107F | 107G | 107H | 107I | 107J | 107K | 107L | 107M | 107N | 107O | 107P | 107Q | 107R | 107S | 107T | 107U | 107V | 107W | 107X | 107Y | 107Z | 108A | 108B | 108C | 108D | 108E | 108F | 108G | 108H | 108I | 108J | 108K | 108L | 108M | 108N | 108O | 108P | 108Q | 108R | 108S | 108T | 108U | 108V | 108W | 108X | 108Y | 108Z | 109A | 109B | 109C | 109D | 109E | 109F | 109G | 109H | 109I | 109J | 109K | 109L | 109M | 109N | 109O | 109P | 109Q | 109R | 109S | 109T | 109U | 109V | 109W | 109X | 109Y | 109Z | 110A | 110B | 110C | 110D | 110E | 110F | 110G | 110H | 110I | 110J | 110K | 110L | 110M | 110N | 110O | 110P | 110Q | 110R | 110S | 110T | 110U | 110V | 110W | 110X | 110Y | 110Z | 111A | 111B | 111C | 111D | 111E | 111F | 111G | 111H | 111I | 111J | 111K | 111L | 111M | 111N | 111O | 111P | 111Q | 111R | 111S | 111T | 111U | 111V | 111W | 111X | 111Y | 111Z | 112A | 112B | 112C | 112D | 112E | 112F | 112G | 112H | 112I | 112J | 112K | 112L | 112M | 112N | 112O | 112P | 112Q | 112R | 112S | 112T | 112U | 112V | 112W | 112X | 112Y | 112Z | 113A | 113B | 113C | 113D | 113E | 113F | 113G | 113H | 113I | 113J | 113K | 113L | 113M | 113N | 113O | 113P | 113Q | 113R | 113S | 113T | 113U | 113V | 113W | 113X | 113Y | 113Z | 114A | 114B | 114C | 114D | 114E | 114F | 114G | 114H | 114I | 114J | 114K | 114L | 114M | 114N | 114O | 114P | 114Q | 114R | 114S | 114T | 114U | 114V | 114W | 114X | 114Y | 114Z | 115A | 115B | 115C | 115D | 115E | 115F | 115G | 115H | 115I | 115J | 115K | 115L | 115M | 115N | 115O | 115P | 115Q | 115R | 115S | 115T | 115U | 115V | 115W | 115X | 115Y | 115Z | 116A | 116B | 116C | 116D | 116E | 116F | 116G | 116H | 116I | 116J | 116K | 116L | 116M | 116N | 116O | 116P | 116Q | 116R | 116S | 116T | 116U | 116V | 116W | 116X | 116Y | 116Z | 117A | 117B | 117C | 117D | 117E | 117F | 117G | 117H | 117I | 117J | 117K | 117L | 117M | 117N | 117O | 117P | 117Q | 117R | 117S | 117T | 117U | 117V | 117W | 117X | 117Y | 117Z | 118A | 118B | 118C | 118D | 118E | 118F | 118G | 118H | 118I | 118J | 118K | 118L | 118M | 118N | 118O | 118P | 118Q | 118R | 118S | 118T | 118U | 118V | 118W | 118X | 118Y | 118Z | 119A | 119B | 119C | 119D | 119E | 119F | 119G | 119H | 119I | 119J | 119K | 119L | 119M | 119N | 119O | 119P | 119Q | 119R | 119S | 119T | 119U | 119V | 119W | 119X | 119Y | 119Z | 120A | 120B | 120C | 120D | 120E | 120F | 120G | 120H | 120I | 120J | 120K | 120L | 120M | 120N | 120O | 120P | 120Q | 120R | 120S | 120T | 120U | 120V | 120W | 120X | 120Y | 120Z | 121A | 121B | 121C | 121D | 121E | 121F | 121G | 121H | 121I | 121J | 121K | 121L | 121M | 121N | 121O | 121P | 121Q | 121R | 121S | 121T | 121U | 121V | 121W | 121X | 121Y | 121Z | 122A | 122B | 122C | 122D | 122E | 122F | 122G | 122H | 122I | 122J | 122K | 122L | 122M | 122N | 122O | 122P | 122Q | 122R | 122S | 122T | 122U | 122V | 122W | 122X | 122Y | 122Z | 123A | 123B | 123C | 123D | 123E | 123F | 123G | 123H | 123I | 123J | 123K | 123L | 123M | 123N | 123O | 123P | 123Q | 123R | 123S | 123T | 123U | 123V | 123W | 123X | 123Y | 123Z | 124A | 124B | 124C | 124D | 124E | 124F | 124G | 124H | 124I | 124J | 124K | 124L | 124M | 124N | 124O | 124P | 124Q | 124R | 124S | 124T | 124U | 124V | 124W | 124X | 124Y | 124Z | 125A | 125B | 125C | 125D | 125E | 125F | 125G | 125H | 125I | 125J | 125K | 125L | 125M | 125N | 125O | 125P | 125Q | 125R | 125S | 125T | 125U | 125V | 125W | 125X | 125Y | 125Z | 126A | 126B | 126C | 126D | 126E | 126F | 126G | 126H | 126I | 126J | 126K | 126L | 126M | 126N | 126O | 126P | 126Q | 126R | 126S | 126T | 126U | 126V | 126W | 126X | 126Y | 126Z | 127A | 127B | 127C | 127D | 127E | 127F | 127G | 127H | 127I | 127J | 127K | 127L | 127M | 127N | 127O | 127P | 127Q | 127R | 127S | 127T | 127U | 127V | 127W | 127X | 127Y | 127Z | 128A | 128B | 128C | 128D | 128E | 128F | 128G | 128H | 128I | 128J | 128K | 128L | 128M | 128N | 128O | 128P | 128Q | 128R | 128S | 128T | 128U | 128V | 128W | 128X | 128Y | 128Z | 129A | 129B | 129C | 129D | 129E | 129F | 129G | 129H | 129I | 129J | 129K | 129L | 129M | 129N | 129O | 129P | 129Q | 129R | 129S | 129T | 129U | 129V | 129W | 129X | 129Y | 129Z | 130A | 130B | 130C | 130D | 130E | 130F | 130G | 130H | 130I | 130J | 130K | 130L | 130M | 130N | 130O | 130P | 130Q | 130R | 130S | 130T | 130U | 130V | 130W | 130X | 130Y | 130Z | 131A | 131B | 131C | 131D | 131E | 131F | 131G | 131H | 131I | 131J | 131K | 131L | 131M | 131N | 131O | 131P | 131Q | 131R | 131S | 131T | 131U | 131V | 131W | 131X | 131Y | 131Z | 132A | 132B | 132C | 132D | 132E | 132F | 132G | 132H | 132I | 132J | 132K | 132L | 132M | 132N | 132O | 132P | 132Q | 132R | 132S | 132T | 132U | 132V | 132W | 132X | 132Y | 132Z | 133A | 133B | 133C | 133D | 133E | 133F | 133G | 133H | 133I | 133J | 133K | 133L | 133M | 133N | 133O | 133P | 133Q | 133R | 133S | 133T | 133U | 133V | 133W | 133X | 133Y | 133Z | 134A | 134B | 134C | 134D | 134E | 134F | 134G | 134H | 134I | 134J | 134K | 134L | 134M | 134N | 134O | 134P | 134Q | 134R | 134S | 134T | 134U | 134V | 134W | 134X | 134Y | 134Z | 135A | 135B | 135C | 135D | 135E | 135F | 135G | 135H | 135I | 135J | 135K | 135L | 135M | 135N | 135O | 135P | 135Q | 135R | 135S | 135T | 135U | 135V | 135W | 135X | 135Y | 135Z | 136A | 136B | 136C | 136D | 136E | 136F | 136G | 136H | 136I | 136J | 136K | 136L | 136M | 136N | 136O | 136P | 136Q | 136R | 136S | 136T | 136U | 136V | 136W | 136X | 136Y | 136Z | 137A | 137B | 137C | 137D | 137E | 137F | 137G | 137H | 137I | 137J | 137K | 137L | 137M | 137N | 137O | 137P | 137Q | 137R | 137S | 137T | 137U | 137V | 137W | 137X | 137Y | 137Z | 138A | 138B | 138C | 138D | 138E | 138F | 138G | 138H | 138I | 138J | 138K | 138L | 138M | 138N | 138O | 138P | 138Q | 138R | 138S | 138T | 138U | 138V | 138W | 138X | 138Y | 138Z | 139A | 139B | 139C | 139D | 139E | 139F | 139G | 139H | 139I | 139J | 139K | 139L | 139M | 139N | 139O | 139P | 139Q | 139R | 139S | 139T | 139U | 139V | 139W | 139X | 139Y | 139Z | 140A | 140B | 140C | 140D | 140E | 140F | 140G | 140H | 140I | 140J | 140K | 140L | 140M | 140N | 140O | 140P | 140Q | 140R | 140S | 140T | 140U | 140V | 140W | 140X | 140Y | 140Z | 141A | 141B | 141C | 141D | 141E | 141F | 141G | 141H | 141I | 141J | 141K | 141L | 141M | 141N | 141O | 141P | 141Q | 141R | 141S | 141T | 141U | 141V | 141W | 141X | 141Y | 141Z | 142A | 142B | 142C | 142D | 142E | 142F | 142G | 142H | 142I | 142J | 142K | 142L | 142M | 142N | 142O | 142P | 142Q | 142R | 142S | 142T | 142U | 142V | 142W | 142X | 142Y | 142Z | 143A | 143B | 143C | 143D | 143E | 143F | 143G | 143H | 143I | 143J | 143K | 143L | 143M | 143N | 143O | 143P | 143Q | 143R | 143S | 143T | 143U | 143V | 143W | 143X | 143Y | 143Z | 144A | 144B | 144C | 144D | 144E | 144F | 144G | 144H | 144I | 144J | 144K | 144L | 144M | 144N | 144O | 144P | 144Q | 144R | 144S | 144T | 144U | 144V | 144W | 144X | 144Y | 144Z | 145A | 145B | 145C | 145D | 145E | 145F | 145G | 145H | 145I | 145J | 145K | 145L | 145M | 145N | 145O | 145P | 145Q | 145R | 145S | 145T | 145U | 145V | 145W | 145X | 145Y | 145Z | 146A | 146B | 146C | 146D | 146E | 146F | 146G | 146H | 146I | 146J | 146K | 146L | 146M | 146N | 146O | 146P | 146Q | 146R | 146S | 146T | 146U | 146V | 146W | 146X | 146Y | 146Z | 147A | 147B | 147C | 147D | 147E | 147F | 147G | 147H | 147I | 147J | 147K | 147L | 147M | 147N | 147O | 147P | 147Q | 147R | 147S | 147T | 147U | 147V | 147W | 147X | 147Y | 147Z | 148A | 148B | 148C | 148D | 148E | 148F | 148G | 148H | 148I | 148J | 148K | 148L | 148M | 148N | 148O | 148P | 148Q | 148R | 148S | 148T | 148U | 148V | 148W | 148X | 148Y | 148Z | 149A | 149B | 149C | 149D | 149E | 149F | 149G | 149H | 149I | 149J | 149K | 149L | 149M | 149N | 149O | 149P | 149Q | 149R | 149S | 149T | 149U | 149V | 149W | 149X | 149Y | 149Z | 150A | 150B | 150C | 150D | 150E | 150F | 150G | 150H | 150I | 150J | 150K | 150L | 150M | 150N | 150O | 150P | 150Q | 150R | 150S | 150T | 150U | 150V | 150W | 150X | 150Y | 150Z | 151A | 151B | 151C | 151D | 151E | 151F | 151G | 151H | 151I | 151J | 151K | 151L | 151M | 151N | 151O | 151P | 151Q | 151R | 151S | 151T | 151U | 151V | 151W | 151X | 151Y | 151Z | 152A | 152B | 152C | 152D | 152E | 152F | 152G | 152H | 152I | 152J | 152K | 152L | 152M | 152N | 152O | 152P | 152Q | 152R | 152S | 152T | 152U | 152V | 152W | 152X | 152Y | 152Z | 153A | 153B | 153C | 153D | 153E | 153F | 153G | 153H | 153I | 153J | 153K | 153L | 153M | 153N | 153O | 153P | 153Q | 153R | 153S | 153T | 153U | 153V | 153W | 153X | 153Y | 153Z | 154A | 154B | 154C | 154D | 154E | 154F | 154G | 154H | 154I | 154J | 154K | 154L | 154M | 154N | 154O | 154P | 154Q | 154R | 154S | 154T | 154U | 154V | 154W | 154X | 154Y | 154Z | 155A | 155B | 155C | 155D | 155E | 155F | 155G | 155H | 155I | 155J | 155K | 155L | 155M | 155N | 155O | 155P | 155Q | 155R | 155S | 155T | 155U | 155V | 155W | 155X | 155Y | 155Z | 156A | 156B | 156C | 156D | 156E | 156F | 156G | 156H | 156I | 156J | 156K | 156L | 156M | 156N | 156O | 156P | 156Q | 156R | 156S | 156T | 156U | 156V | 156W | 156X | 156Y | 156Z | 157A | 157B | 157C | 157D | 157E | 157F | 157G | 157H | 157I | 157J | 157K | 157L | 157M | 157N | 157O | 157P | 157Q | 157R | 157S | 157T | 157U | 157V | 157W | 157X | 157Y | 157Z | 158A | 158B | 158C | 158D | 158E | 158F | 158G | 158H | 158I | 158J | 158K | 158L | 158M | 158N | 158O | 158P | 158Q | 158R | 158S | 158T | 158U | 158V | 158W | 158X | 158Y | 158Z | 159A | 159B | 159C | 159D | 159E | 159F | 159G | 159H | 159I | 159J | 159K | 159L | 159M | 159N | 159O | 159P | 159Q | 159R | 159S | 159T | 159U | 159V | 159W | 159X | 159Y | 159Z | 160A | 160B | 160C | 160D | 160E | 160F | 160G | 160H | 160I | 160J | 160K | 160L | 160M | 160N | 160O | 160P | 160Q | 160R | 160S | 160T | 160U | 160V | 160W | 160X | 160Y | 160Z | 161A | 161B | 161C | 161D | 161E | 161F | 161G | 161H | 161I | 161J | 161K | 161L | 161M | 161N | 161O | 161P | 161Q | 161R | 161S | 161T | 161U | 161V | 161W | 161X | 161Y | 161Z | 162A | 162B | 162C | 162D | 162E | 162F | 162G | 162H | 162I | 162J | 162K | 162L | 162M | 162N | 162O | 162P | 162Q | 162R | 162S | 162T | 162U | 162V | 162W | 162X | 162Y | 162Z | 163A | 163B | 163C | 163D | 163E | 163F | 163G | 163H | 163I | 163J | 163K | 163L | 163M | 163N | 163O | 163P | 163Q | 163R | 163S | 163T | 163U | 163V | 163W | 163X | 163Y | 163Z | 164A | 164B | 164C | 164D | 164E | 164F | 164G | 164H | 164I | 164J | 164K | 164L | 164M | 164N | 164O | 164P | 164Q | 164R | 164S | 164T | 164U | 164V | 164W | 164X | 164Y | 164Z | 165A | 165B | 165C | 165D | 165E | 165F | 165G | 165H | 165I | 165J | 165K | 165L | 165M | 165N | 165O | 165P | 165Q | 165R | 165S | 165T | 165U | 165V | 165W | 165X | 165Y | 165Z | 166A | 166B | 166C | 166D | 166E | 166F | 166G | 166H | 166I | 166J | 166K | 166L | 166M | 166N | 166O | 166P | 166Q | 166R | 166S | 166T | 166U | 166V | 166W | 166X | 166Y | 166Z | 167A | 167B | 167C | 167D | 167E | 167F | 167G | 167H | 167I | 167J | 167K | 167L | 167M | 167N | 167O | 167P | 167Q | 167R | 167S | 167T | 167U | 167V | 167W | 167X | 167Y | 167Z | 168A | 168B | 168C | 168D | 168E | 168F | 168G | 168H | 168I | 168J | 168K | 168L | 168M | 168N | 168O | 168P | 168Q | 168R | 168S | 168T | 168U | 168V | 168W | 168X | 168Y | 168Z | 169A | 169B | 169C | 169D | 169E | 169F | 169G | 169H | 169I | 169J | 169K | 169L | 169M | 169N | 169O | 169P | 169Q | 169R | 169S | 169T | 169U | 169V | 169W | 169X | 169Y | 169Z | 170A | 170B | 170C | 170D | 170E | 170F | 170G | 170H | 170I | 170J | 170K | 170L | 170M | 170N | 170O | 170P | 170Q | 170R | 170S | 170T | 170U | 170V | 170W | 170X | 170Y | 170Z | 171A | 171B | 171C | 171D | 171E | 171F | 171G | 171H | 171I | 171J | 171K | 171L | 171M | 171N | 171O | 171P | 171Q | 171R | 171S | 171T | 171U | 171V | 171W | 171X | 171Y | 171Z | 172A | 172B | 172C | 172D | 172E | 172F | 172G | 172H | 172I | 172J | 172K | 172L | 172M | 172N | 172O | 172P | 172Q | 172R | 172S | 172T | 172U | 172V | 172W | 172X | 172Y | 172Z | 173A | 173B | 173C | 173D | 173E | 173F | 173G | 173H | 173I | 173J | 173K | 173L | 173M | 173N | 173O | 173P | 173Q | 173R | 173S | 173T | 173U | 173V | 173W | 173X | 173Y | 173Z | 174A | 174B | 174C | 174D | 174E | 174F | 174G | 174H | 174I | 174J | 174K | 174L | 174M | 174N | 174O | 174P | 174Q | 174R | 174S | 174T | 174U | 174V | 174W | 174X | 174Y | 174Z | 175A | 175B | 175C | 175D | 175E | 175F | 175G | 175H | 175I | 175J | 175K | 175L | 175M | 175N | 175O | 175P | 175Q | 175R | 175S | 175T | 175U | 175V | 175W | 175X | 175Y | 175Z | 176A | 176B | 176C | 176D | 176E | 176F | 176G | 176H | 176I | 176J | 176K | 176L | 176M | 176N | 176O | 176P | 176Q | 176R | 176S | 176T | 176U | 176V | 176W | 176X | 176Y | 176Z | 177A | 177B | 177C | 177D | 177E | 177F | 177G | 177H | 177I | 177J | 177K | 177L | 177M | 177N | 177O | 177P | 177Q | 177R | 177S | 177T | 177U | 177V | 177W | 177X | 177Y | 177Z | 178A | 178B | 178C | 178D | 178E | 178F | 178G | 178H | 178I | 178J | 178K | 178L | 178M | 178N | 178O | 178P | 178Q | 178R | 178S | 178T | 178U | 178V | 178W | 178X | 178Y | 178Z | 179A | 179B | 179C | 179D | 179E | 179F | 179G | 179H | 179I | 179J | 179K | 179L | 179M | 179N | 179O | 179P | 179Q | 179R | 179S | 179T | 179U | 179V | 179W | 179X | 179Y | 179Z | 180A | 180B | 180C | 180D | 180E | 180F | 180G | 180H | 180I | 180J | 180K | 180L | 180M | 180N | 180O | 180P | 180Q | 180R |

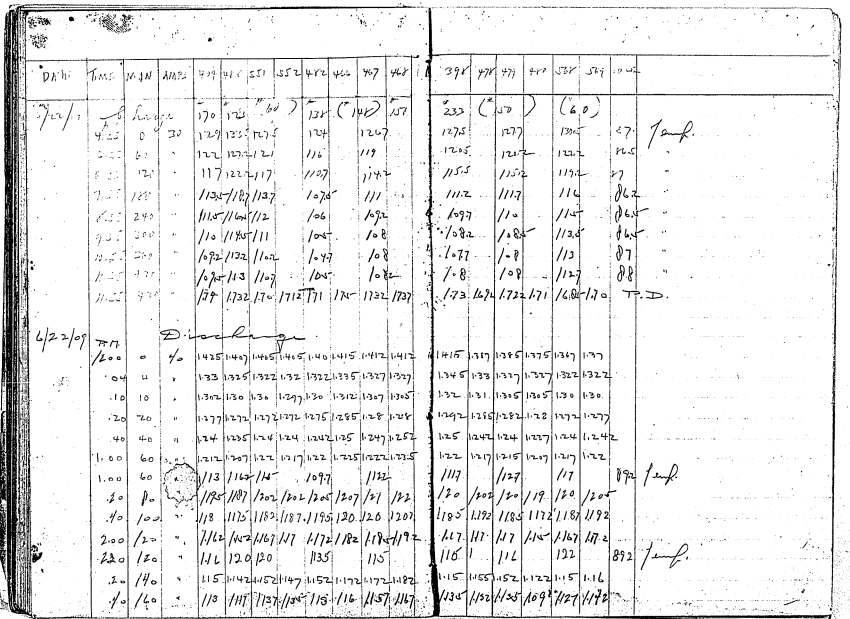


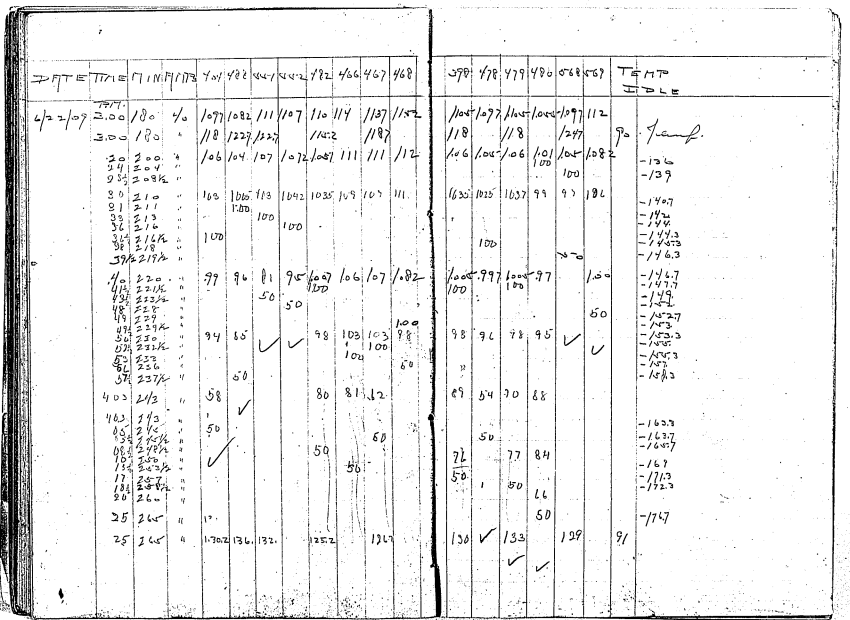
DATE	TIME	MIN	FMTS	704	488	451	842	482	466	467	468	398	478	475	482	458	469	TEMP IDLE
	PM																	
6/21/09	3.00	/80	y°	112	1105	1137	1137	1117	1152	1152	111	113	1125	1123	1092	113	1137	
	3.00	/80	"	113	120	120		115		118		117	11	1102		122		884 Temp
	3:20	200	"	107	107	111	1105	108	1121	113	114	110	1072	1052	1052	110	1112	
	39½	219½												100				
	:40	220	"	1022	1002	1065	106	103	1088	1070	1050	104	1035	104	999	108	107	-146.2
	41	221			100											100		-147.3
	46	226	"	100														-150.7
	50	230	"	982	96	101	1011	100	106	1082	1077	1065	1082	101	97	963	104	-153.3
	54½	234½	"			100							100					-154.3
	55	235	"				100							100				-154.7
	55	235	"									100						-155.8
	56	236	"														100	-156.7
	58	238	"													50		-158.1
	58½	238½	"								100							-159
	1.00	240	"	934	98	971	90	964	1025	1031	96	98	97	98	96		83	
	1.00	240	"	/27	/31	/31		/2	/20		/222	/237		/322		/20		894 Temp
	1.00½	240½					50											-161.7
	01	241	"							100							50	-162.7
	01½	241½														✓		-163.5
	.05	245	"		✓	✓					50							
	/0	250	"	82	50			90	947	88		936	95	932	82		✓	-166.7
	/05½	250½										50						-170.3
	/0	250	"	50		✓					50							-172.7
	.20	260	"						.78									-176
	.24	264	"	✓					.50			84		84	87			-177
	24½	264½										50						
	.30	270	"											.57	.747			-180.7
	.31	271	"										✓	.50				-184.7
	.70	290	"											✓	✓			



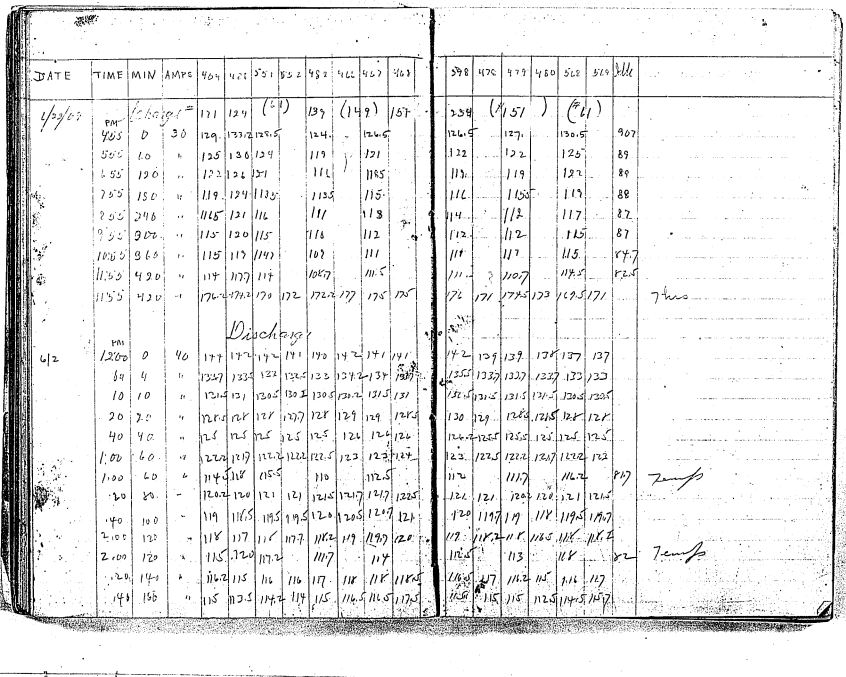
DATE	TIME	MIN	FIRING	404	488	441	442	482	466	467	468	578	478	477	478	479	479	TEMP IDLE
6/21/09	PM.	Charge		149	122	149		137	(147)	149		232	(149)			157		
	4:55	0	30	1309	1349	1302		1286	1277			1284	1305		1314		905	TEMP
	5:55	60	"	1285	135	122		1232	126			122	127		1275		91	"
	6:55	120	"	1291	1285	1381		1232	1212			1222	122		1247		935	"
	7:55	180	"	1306	1249	1201		119	111			1201	118		121		93	"
	8:55	240	"	116	121	118		111	1147			115	115		119		92	"
	9:55	300	"	115	119	117		110	113			1206	114		118		92	"
	10:55	360	"	114	118	115		1095	1125			1127	113		1175		1597	"
	11:55	420	"	1132	117	114		109	112			112	112		117		895	"
	11:55	420	"	173	1762	1695	171	171	174	1722	173	1725	169	172	171	166	170	RD.
6/22/09	AM.	Discharge.																
	2:00	0	4/0	143	1415	1415	140	139	141	1402	1402	141	138	138	137	131	1382	
	.04	4	"	133	1382	1361	1315	132	133	133	1322	1324	133	1325	1322	1315	132	
	.10	10	"	1305	1332	1331	1297	130	1315	131	1302	132	131	131	131	1301	130	
	.20	20	"	127	1277	1324	127	1277	1265	1284	128	1295	1282	128	127	1277	128	
	.40	40	"	124	124	124	124	1284	125	125	1255	1255	1284	124	124	124	1282	
	1.00	60	"	121	121	1217	1217	122	1224	1224	123	1222	127	1217	121	1217	122	
	1.00	60	"	1147	1165	116		1112	114			113	114		1145		962	Temp
	20	80	"	120	1195	120	121	121	121	121	122	120.2	121	1202	1197	1202	121	
	.40	100	"	1162	118	1155	1155	1197	120	120	121	119	1197	119	118	119	1197	
	2.00	120	"	1167	1162	117	117	1182	119	119	1192	117.5	1182	1175	116	1175	1167	
	2.00	120	"	116.5	1212	120		114	117			116.2	117		1232		845	Temp
	8.20	340	"	1155	1195	1167	1155	116	1177	1177	1142	116	116	116	114	1157	1165	
	.40	100	"	113	1192	1135	113	113	116	1162	117	114	114	114	111	1135	115	

DATE	TIME	MIN	AMPS	40#	44#	55#	55#	48#	46#	47#	41#	36#	47#	49#	44#	43#	58#	104#	
6/22/24	3:00	120	40	119	109 111		110	113	114	114	115	111	111	115	107	112	112		
	3:00	180	"	117	122 122			115		119		112		115		125		87	
	10	190	"													125			
	20	200	"	127	115 104		108	113	112	112	113	115	102	104	107	120	107		
	30	210	"	104	102 104		105	104	110	110	115	115	102	115	121	105	105		
	36	216	"		100 100											120	120		144
	39	219	"				100												146.
	42	222	"	100	96 92		97	102	102	104	109	103	102	103	99	56	104		
	45	225	"	100												50			148.3
	47	227	"			50											120		149.
	48	228	"																150.3
	49	229	"					100				100	100						152.
	51	231	"																152.7
	53	233	"	95	90		50	96	104	104	102	99	95	100	91		69		153.3
	55	235	"		V						100						50		155.7
	56	236	"				V				100								158.7
	57	237	"								50								159.7
4:00	240	"	87	72			94	100	97			95	92	95	93				160.
	4:00	240	"	120	126	120		114		122		120		122		132		87	
	01	241	"		50					50									161.3
	02	242	"																165.
	04	244	"	56															166.
	09	249	"					55	83			85	58	87	72	V	V		169.3
	14	254	"	V				50	50										172.7
	19	259	"									67	67	77					175.7
	20	260	"	V								50	50		50				177.3
	24	264	"																182.
	30	270	"																
	33	273	"	126	124.2	130		127		129		124.2		121		132		87	
													V		V				
														V					

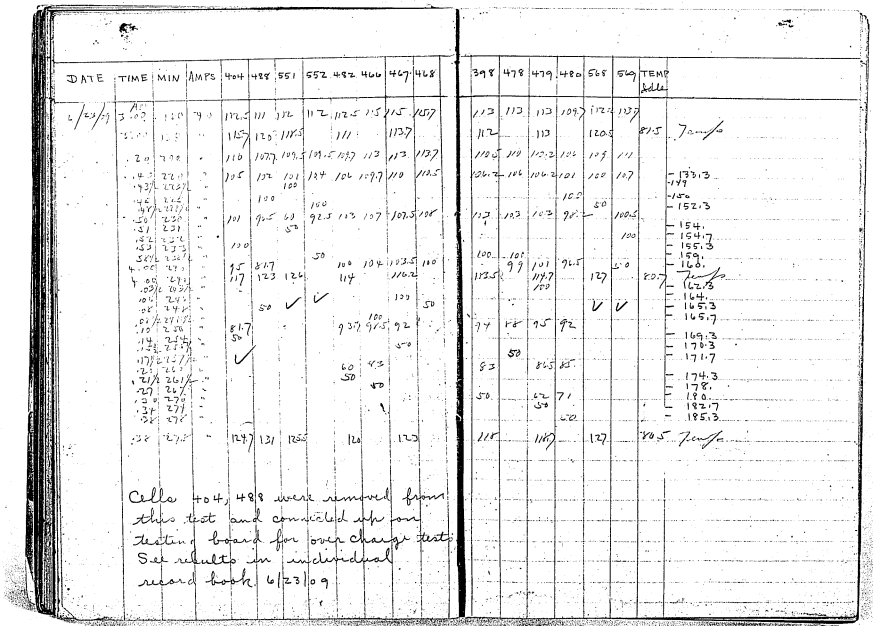




| DATE | TIME | MINIMUM | 484 | 483 | 482 | 481 | 480 | 479 | 478 | 477 | 476 | 475 | 474 | 473 | 472 | 471 | 470 | 469 | 468 | 467 | 466 | 465 | 464 | 463 | 462 | 461 | 460 | 459 | 458 | 457 | 456 | 455 | 454 | 453 | 452 | 451 | 450 | 449 | 448 | 447 | 446 | 445 | 444 | 443 | 442 | 441 | 440 | 439 | 438 | 437 | 436 | 435 | 434 | 433 | 432 | 431 | 430 | 429 | 428 | 427 | 426 | 425 | 424 | 423 | 422 | 421 | 420 | 419 | 418 | 417 | 416 | 415 | 414 | 413 | 412 | 411 | 410 | 409 | 408 | 407 | 406 | 405 | 404 | 403 | 402 | 401 | 400 | 399 | 398 | 397 | 396 | 395 | 394 | 393 | 392 | 391 | 390 | 389 | 388 | 387 | 386 | 385 | 384 | 383 | 382 | 381 | 380 | 379 | 378 | 377 | 376 | 375 | 374 | 373 | 372 | 371 | 370 | 369 | 368 | 367 | 366 | 365 | 364 | 363 | 362 | 361 | 360 | 359 | 358 | 357 | 356 | 355 | 354 | 353 | 352 | 351 | 350 | 349 | 348 | 347 | 346 | 345 | 344 | 343 | 342 | 341 | 340 | 339 | 338 | 337 | 336 | 335 | 334 | 333 | 332 | 331 | 330 | 329 | 328 | 327 | 326 | 325 | 324 | 323 | 322 | 321 | 320 | 319 | 318 | 317 | 316 | 315 | 314 | 313 | 312 | 311 | 310 | 309 | 308 | 307 | 306 | 305 | 304 | 303 | 302 | 301 | 300 | 299 | 298 | 297 | 296 | 295 | 294 | 293 | 292 | 291 | 290 | 289 | 288 | 287 | 286 | 285 | 284 | 283 | 282 | 281 | 280 | 279 | 278 | 277 | 276 | 275 | 274 | 273 | 272 | 271 | 270 | 269 | 268 | 267 | 266 | 265 | 264 | 263 | 262 | 261 | 260 | 259 | 258 | 257 | 256 | 255 | 254 | 253 | 252 | 251 | 250 | 249 | 248 | 247 | 246 | 245 | 244 | 243 | 242 | 241 | 240 | 239 | 238 | 237 | 236 | 235 | 234 | 233 | 232 | 231 | 230 | 229 | 228 | 227 | 226 | 225 | 224 | 223 | 222 | 221 | 220 | 219 | 218 | 217 | 216 | 215 | 214 | 213 | 212 | 211 | 210 | 209 | 208 | 207 | 206 | 205 | 204 | 203 | 202 | 201 | 200 | 199 | 198 | 197 | 196 | 195 | 194 | 193 | 192 | 191 | 190 | 189 | 188 | 187 | 186 | 185 | 184 | 183 | 182 | 181 | 180 | 179 | 178 | 177 | 176 | 175 | 174 | 173 | 172 | 171 | 170 | 169 | 168 | 167 | 166 | 165 | 164 | 163 | 162 | 161 | 160 | 159 | 158 | 157 | 156 | 155 | 154 | 153 | 152 | 151 | 150 | 149 | 148 | 147 | 146 | 145 | 144 | 143 | 142 | 141 | 140 | 139 | 138 | 137 | 136 | 135 | 134 | 133 | 132 | 131 | 130 | 129 | 128 | 127 | 126 | 125 | 124 | 123 | 122 | 121 | 120 | 119 | 118 | 117 | 116 | 115 | 114 | 113 | 112 | 111 | 110 | 109 | 108 | 107 | 106 | 105 | 104 | 103 | 102 | 101 | 100 | 99 | 98 | 97 | 96 | 95 | 94 | 93 | 92 | 91 | 90 | 89 | 88 | 87 | 86 | 85 | 84 | 83 | 82 | 81 | 80 | 79 | 78 | 77 | 76 | 75 | 74 | 73 | 72 | 71 | 70 | 69 | 68 | 67 | 66 | 65 | 64 | 63 | 62 | 61 | 60 | 59 | 58 | 57 | 56 | 55 | 54 | 53 | 52 | 51 | 50 | 49 | 48 | 47 | 46 | 45 | 44 | 43 | 42 | 41 | 40 | 39 | 38 | 37 | 36 | 35 | 34 | 33 | 32 | 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | TEMP | TITLE |
|---|---|---

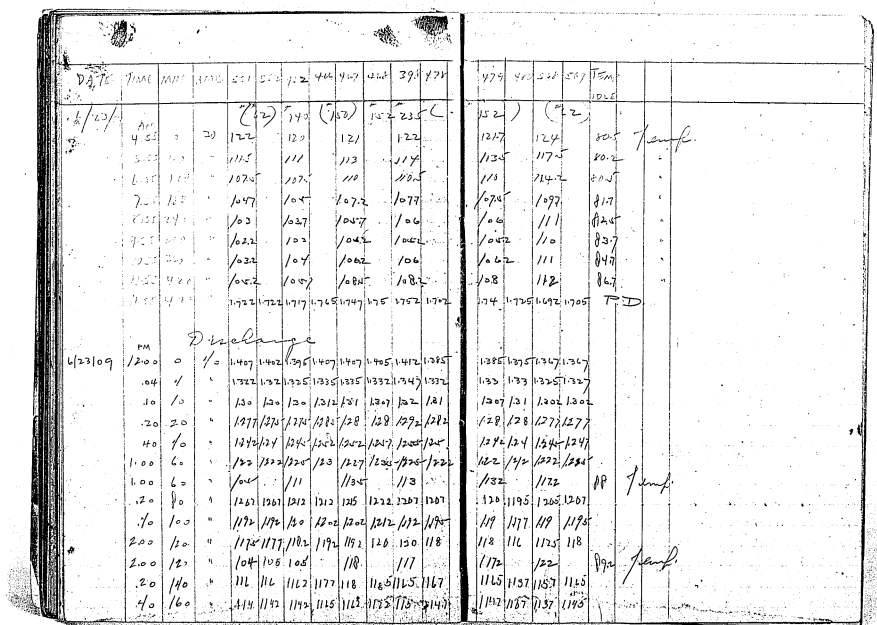


DATE	TIME	MIN	AMPS	464	421	551	532	482	446	467	463	598	476	479	480	525	529	444	
6/3/67		Charging		121	124		(24)		139	(149)	154	138		(151)		(12)			
	PM 9:05	0	30	129	133.2	125.5		124		126.5		126.5		127		130.5		907	
	5:55	10	"	125	130	124		119		121		122		122		125		89	
	6:55	120	"	122	126	121		116		118.5		118		119		122		89	
	7:55	150	"	119	124	118.5		113.5		115		117		118		119		88	
	8:55	240	"	116.5	121	116		111		113		114		112		117		87	
	9:55	300	"	115	120	115		116		112		112		112		115		87	
	10:55	360	"	115	117	114.5		102		111		114		117		115		87.5	
	11:55	420	"	114	117.5	114		104.5		111.5		111		110.5		114.5		87.5	
	11:55	420	"	176	174.2	170	172	172.5	177	175	175	172	171	177.5	173	169.5	171		Turbo
							Discharge												
6/2	PM 12:00	0	40	177	174	174	171	170	174	171	171	142	139	139	134	137	137		
	04	4	"	133.5	133.5	132	132.5	132	134.5	134	134.5	133.5	133.5	133.5	133	133	133		
	10	10	"	131.5	131	130.5	130	130.5	130.5	130.5	131	131.5	131.5	131.5	131.5	130.5	130.5		
	20	20	"	128.5	128	127	127.5	128	128	129	129	130	129	128.5	128.5	128	128		
	40	40	"	125	125	125	125	125	125	126	126	126.5	126.5	126.5	126	126	125.5		
	1:00	60	"	122.5	121.5	122	122.5	122.5	123	123	124	123	122.5	122.5	121.5	122.5	122		
	1:00	60	"	114.5	118	115.5		110		112.5		112		111.5		116.5		84.5	Temp
	:20	80	-	120.5	120	121	121	121.5	121.5	121.5	122.5	121	121	120.5	120	121	120.5		
	:40	100	-	119	116.5	119.5	119.5	120	120.5	120.5	121	120	119.5	119	118	119.5	119.5		
	2:00	120	-	118	117	117	117	117.5	119	119	120	119	118.5	118.5	118.5	118.5	118.5		
	2:00	120	"	115	120	117.5		111.5		114		115		113		118		82	Temp
	:20	140	"	116.5	115	116	116	117	118	118	118.5	116.5	117	116.5	115	117	117		
	:40	160	"	115	120.5	114.5	114	115	116.5	116.5	117.5	115	115	115.5	114.5	116.5	116.5		



DATE	TIME	MIN	AMPS	404	488	551	552	482	466	467	468	398	478	479	480	568	569	TEMP Addl	
6/23/09	3:00	110	7.0	112.5	111	112	112	112.5	115	115	107.7	113	113	113	109.7	112.5	113.7		
				115.7	120	109.5		111		113.7		112		113		120.5		81.5	7 am/s
				110	107.7	109.5	109.5	109.5	113	113	113.7	110.5	110	110.2	106	109.5	111		
				105	102	101	104	106	109.7	110	110.5	106.7	106	106.2	101	108	107		133.3
						100													149
					100										105	80			150
							100												152.3
				101	96.5	60	92.5	103	107	102.5	105	103	103	103	98		100.5		154.
						50											100		154.7
				100															155.3
							50					100	101						159.
				95	81.7			100	104	103.5	100		99	101	96.5	50			160.
				117	123	126		114		106.2		123.5		114.7		127		82.7	7 am/s
														120					162.3
					50	✓	✓			120	50					V	V		164.
									100										165.3
								93.7	95.5	92		94	88	95	92				165.7
				81.7							50								169.3
				50									80						170.3
				✓															171.7
								60	93			83		85.5	85				174.3
								50											178.
									80										180.
												50		52	71				182.7
														50					185.3
															62				
				124	131	125		120		123		115		116		127		78.5	7 am/s

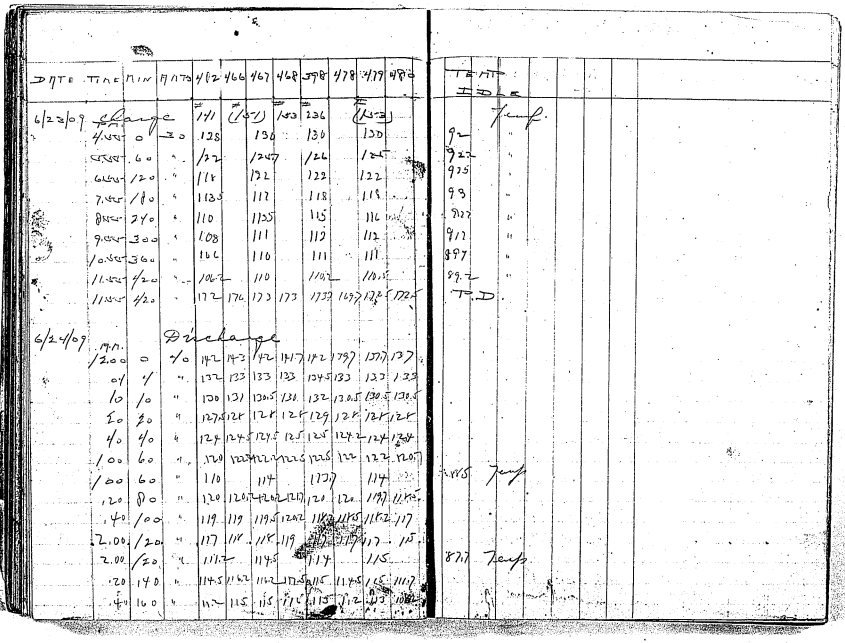
Cells 404, 488 were removed from the test and connected up on testing board for over charge test. See results in individual record book 6/23/09



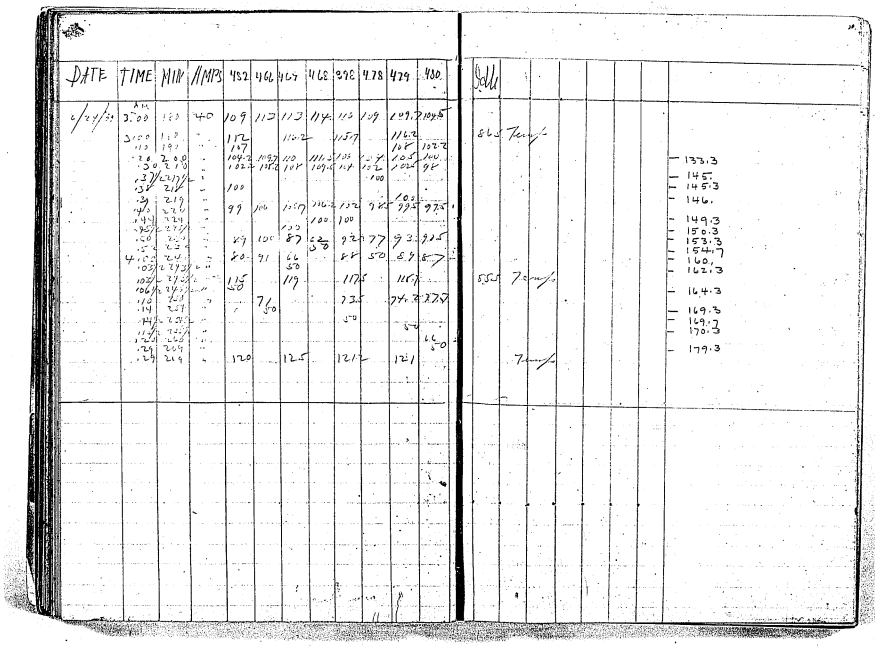
| DATE | TIME | MP | | |

DATE	TIME	MIN	AMPS	551	552	548	549	547	548	398	478	479	480	568	569	TEMP TABLE	
4/2 3/09	3.00	/80	40	1113	1113	1115	1197	1147	1155	1127	112	112	1075	111	1125		Temp.
	3.00	/80	"	118		118		1217		120		1265		126		905	
	10	190	"	1101	1101	110	1137	1137	1145	111	110	1102	1357	1098	111		
	06	250	"			1084	1084	1082	112	113	1092	1082	1036	1072	1092		
	06	310	"	1062	1062	101	110	111	112	107	1064	1066	1002	103	1077		142.3
	39	2134	"										100	100			143.
	39	2144	"														
	40	220	"	1100	101	103	1023	108	109	1037	1024	1020	992	67	1022		146.7
	41	227	"		100												147.3
	42	2324	"											50	100		148.3
	48	228	"								100						152.
	47	229	"			100											152.7
	50	230	"	96	97	999	1045	105	1033	100	9997	100	91	✓	50		153.3
	52	232	"	50													154.7
	53	2324	"		50				100								155.
	54	233	"					100							✓		157.3
	56	2334	"						50								159.
	59	237	"				100										159.3
					✓												
	4.00	240	"			99	99	94		95	9.0	842	92				
	4.00	240	"	129		122		1276		126		126		104	912		Temp.
	03	2403	"					50									164.7
	08	2412	"	✓						50.							165.3
	10	245	"			50	81			86		87	85				166.7
	102	2552	"				50										170.3
	28	270	"							1050		1049	99				173.3
	22	2627	"									1050					174.7
	27	267	"										1050				178.

Cells 551, 552, 548, 549 were removed from this test and connected up for testing heads for overcharge tests. See results in individual record book, 6/28/09 p. 9.

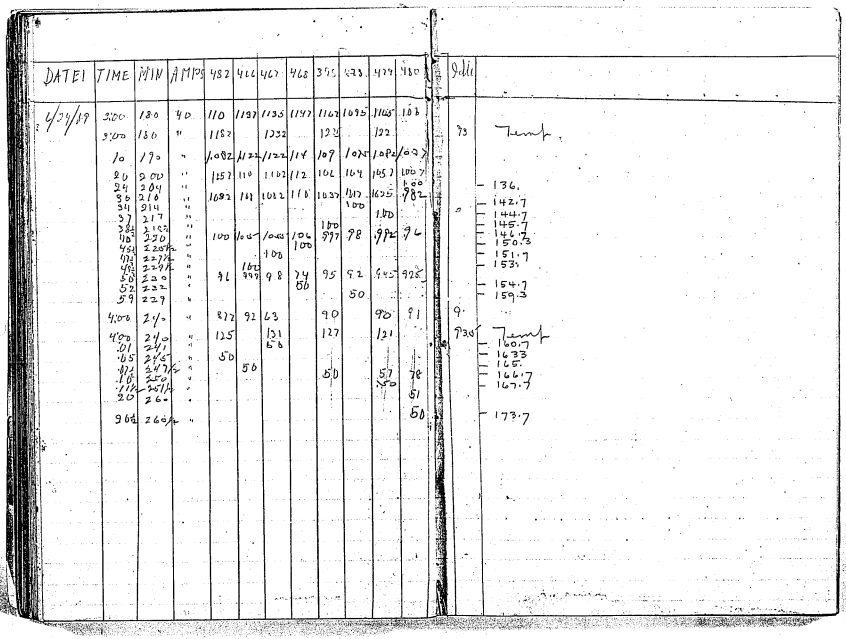


DATE	TIME	MIN	ELEV	#62	#66	#67	#68	#76	#78	#79	#80	Temp
				141	140	140	140	136	137			
6/23/09		Charge										
	4:00	0	30	128		130		130	130			92
	5:00	60	"	132		132		126	126			92.5
	6:00	120	"	118		132		122	122			92.5
	7:00	180	"	118		117		118	118			93
	8:00	240	"	110		115		115	116			93
	9:00	300	"	108		111		112	112			91
	10:00	360	"	106		110		111	111			89
	11:00	420	"	102		110		110	110			89
	11:00	420	"	172	176	173	173	173	173			T.D.
6/24/09		Discharge										
	7:00	0	0	142	143	142	141	142	142			
		01	1	"	132	133	133	133	134	133		
		10	10	"	130	131	130	131	132	132		
		20	20	"	127	128	128	128	128	128		
		40	40	"	124	124	124	124	125	124		
		100	60	"	120	120	120	120	120	122		
		100	60	"	110		114		117	114		Temp
		120	80	"	120	120	120	120	120	120		
		140	100	"	119	119	119	120	120	118		
	2:00	120	120	"	117	117	117	118	118	117		
	2:00	120	120	"	117		114		117	115		Temp
		140	140	"	114	115	115	115	115	115		
		160	160	"	112	115	115	115	115	115		



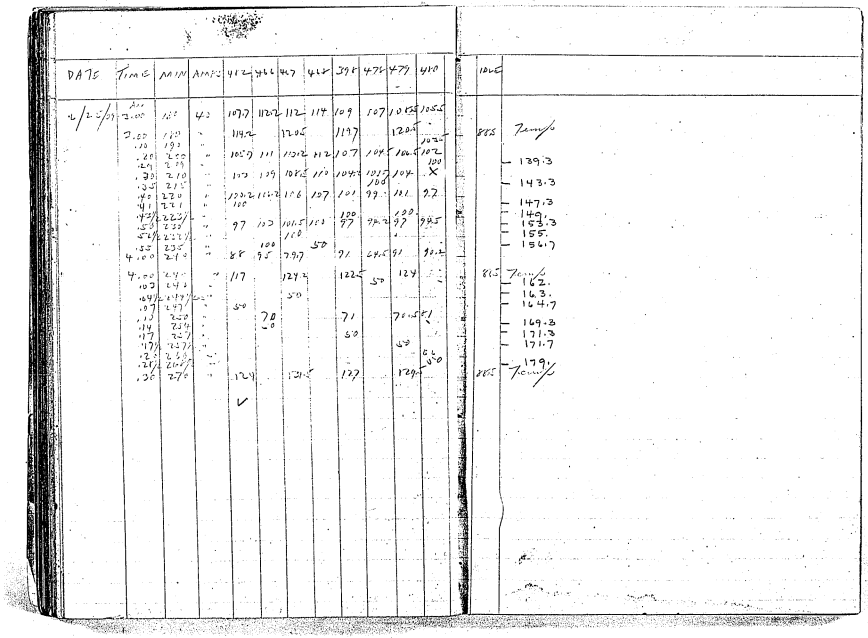
DATE	TIME	MIN	AMPS	452	460	467	468	478	479	480	Sold	
6/27/22	3:00 PM	120	40	109	112	113	114	112	109	109.7	109.5	
	3:00	120	"	112		110.2		111.7		111.2	86.5 Tenn	
	:10	110	"	107						105	102.2	
	:20	2:00	"	104.5	105	110	111.5	105	104.5	105.		133.3
	:30	2:10	"	102.4	104	108	109.4	104	102.2	99		145
	:40	2:20	"						100			145.3
	:50	2:30	"	100								146.
	:59	2:39	"						100			
	1:05	2:45	"	99	100	107	106.2	102	99.5	99.5		149.3
	1:10	2:50	"				100	100				150.3
	1:20	3:00	"		100							153.3
	1:30	3:10	"	97	100	87	89	98	97	97.3	95.5	154.7
	1:40	3:20	"	96	97	66	88	88	96	89	87	160.
	1:50	3:30	"			80						162.3
	2:00	3:40	"	115		119		117.5		116.7	55.5 Tenn	
	2:05	3:45	"	110								164.3
	2:10	3:50	"		76			73		74.3	72.5	
	2:14	3:54	"		80			80		80		169.3
	2:15	3:55	"									169.7
	2:20	4:00	"									170.3
	2:25	4:05	"							66		
	2:29	4:09	"	120		125		121.7		121		179.3
											7 Tenn	

DATE	TIME	MIN	AMPS	482	482	467	485	478	478	479	480	Volts		
4/24/09	6 hours		142	(142)		154	237	(	154	)				
	4:55 AM	30	113.5		125		122.7		124.2			85	Temp.	
	5:25	60	113		117		117.5		118.7			88		
	6:25	120	107		111.5		112.2		112.7			85		
	7:55	180	106		111		111.7		111.7			84.7		
	9:55	240	105		109.2		110		110.2			87.2		
	9:55	300	104		108		108		107.7			88		
	10:55	360	104		108.4		108.2		107.7			89		
	11:55	420	104.7		110.7		110.7		110.5			90.5		
	11:55	420	171	1732	1767	1717	1777	168	1762	1771		T.D.		
						Discharge								
4/24/09	PM 12.00	0	140	1441	1435	1442	1447	141	1382	129	1377			
	.04	4	"	1432	1337	1330	1327	1342	132	1327	1327			
	.10	10	"	1295	1307	1305	1320	1317	1281	1202	1220			
	.20	20	"	1237	1228	1275	1275	1282	1278	1272	1272			
	40	40	"	1224	1247	1242	1232	1232	1242	124	1223			
	1.00	60	"	1222	1222/22	1222	1212	1222	1217	1200				
	1.00	60	"	110	115		114		114			91.7	Temp.	
	20	80	"	1205	1207	1201	1212	1201	1202	1187	1197			
	40	100	"	1178	1199	1157	1203	1182	1185	1184	1162			
	2.00	120	"	1176	1185	1182	1192	117	1172	117	115			
	2.00	120	"	1143		1145		1087		119		92.2	Temp.	
	30	140	"	1155	1179	117	118	1155	1155	1155	1123			
	40	160	"	1127	1157	1155	1165	1135	1135	115	1099			

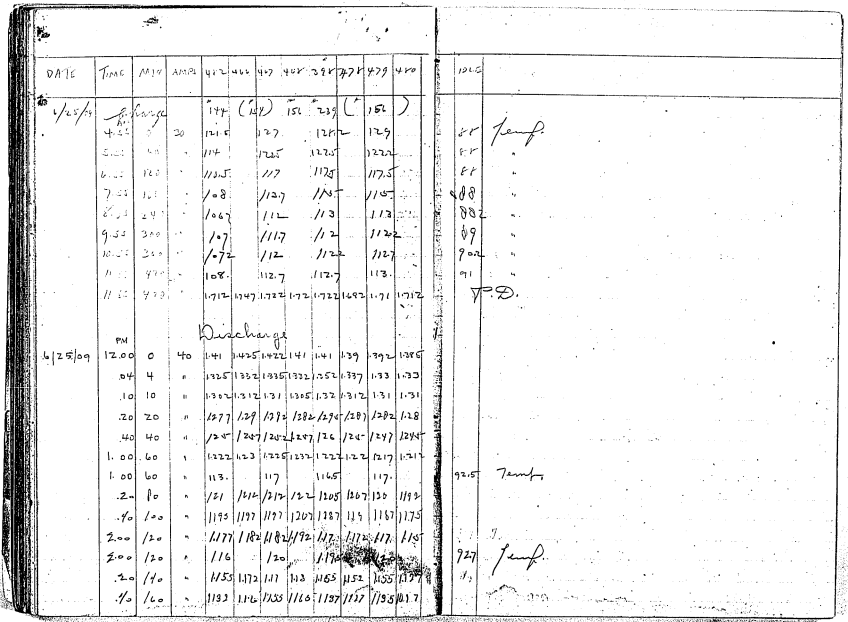


DATE	TIME	MIN	AMPS	482	462	467	468	315	473	477	480	Odd	
4/24/19	3:00	180	40	110	1197	1135	1147	1162	1095	1145	1161		
	3:30	180	"	1152		1232		124		122		73	Temp.
	10	170	"	1082	122	1222	114	109	104	1080	109		
	20	200	"	1157	110	1162	112	106	104	1052	1067		
	24	204	"								140		
	30	210	"	1092	111	1022	116	1037	1013	1025	982		
	34	214	"						100			"	142.7
	37	217	"								1150		144.7
	38	218	"					100					145.7
	40	220	"	100	104	1043	106	997	98	992	96		146.7
	45	225	"				100						150.3
	47	227	"				100						151.7
	48	228	"										153.
	50	230	"				50						154.7
	52	232	"						50				159.3
	59	239	"	91	102	998	98	94	95	92	945	928	
	4:00	240	"	872	92	63		90		980	91	9.	
	4:30	240	"	125		121		127		121		930	Temp.
	01	241	"			60							160.7
	05	245	"	50									163.3
	07	247	"		50			50		517	78		166.
	18	258	"							480			166.7
	19	259	"								51		
	20	260	"										
	9:06	260	"								50		173.7

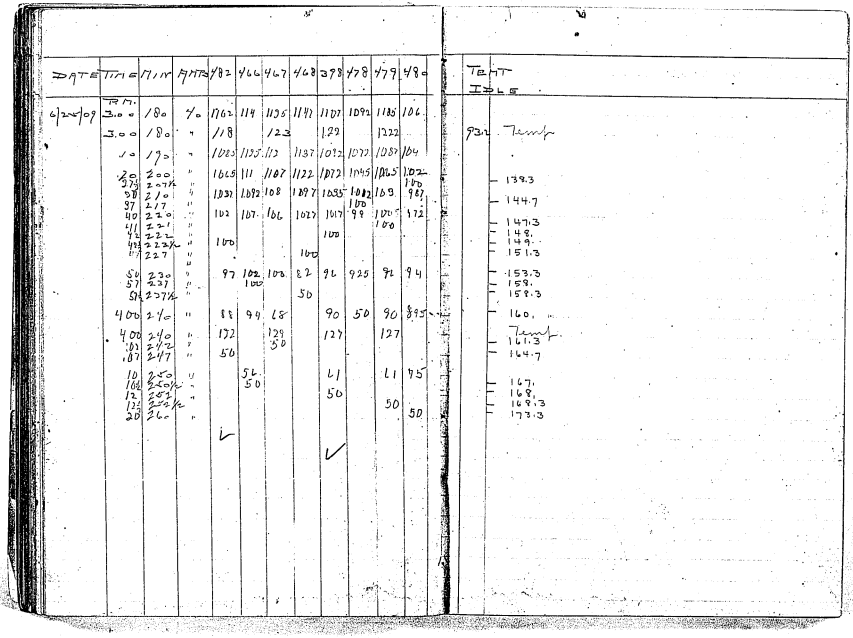
DATE	TIME	MIN	BUR	482	466	467	398	478	479	484		Note
				#3	#3	#3	#5	238	(239)			
26 Jul 07		Charge										
	4:55	0	30	126		130		130.7		130.2	93.5	Temp.
	5:55	60	"	121		125.7		127		126.2	93	"
	6:55	120	"	117		122		123		122.5	93	"
	7:55	180	"	114		118.5		119		119	93	"
	8:55	240	"	111		115		115		116	93	"
	9:55	300	"	109		114		114		114.5	91	"
	10:55	360	"	107.5		113.5		113.5		113.7	90	"
	11:45	420	"	107		112.7		112.5		113	90	"
	11:55	430	"	171	174	171	171.5	172	169.2	171	171.5	P.D.
				Discharge								
6/25	12:00	0	40	144.5	143	142.2	141	142	139	138.5	137	
	.04	4	"	132	133	132.5	132	134	132.8	132.8	132.5	
	.10	10	"	130	131	131	130.2	132	131	131	131	
	.20	20	"	127.7	128	128	128	129	128	128	128	
	.40	40	"	124	125	124.5	125	125	123.2	124	123.7	
	1.00	60	"	122	122.5	122.2	123	122	122.2	122.2	121	
	1.00	60	"	112		116.2		115		114.5	89.7	Temp.
	1.20	80	"	120.2		120.2	120	120	120	120	119	
	1.40	100	"	119.5	119	119	118	118.5	118	118.5	117	
	2.00	120	"	116.7	117	117.2	116.5	116.5	116.2	116.5	115	
	2.00	120	"	114		119		118		119	89	Temp.
	2.20	140	"	115	117	116.2	115	115	115	115	114	
	.40	160	"	113	116	115.5	114.2	113	112.8	113.5	113	



DATE	TIME	AMP	AMPS	412	445	447	478	394	475	479	490	1062	
2/2/07	2.00	220	40	1097	1102	112	114	109	107	1065	1056		
	2.05	220	"	1192		1205		1197		1204		885	Temp
	.10	220	"								1102		
	.20	220	"	1059	111	1132	112	1077	104	1065	1072		
	.25	220	"								100		139.3
	.30	220	"	1170	119	1085	110	1042	1037	104	X		
	.35	220	"						1047				143.3
	.40	220	"	1232	1112	106	107	101	99	101	92		
	.41	220	"	100									147.3
	.42	222	"								100		149.
	.43	220	"	97	103	1015	103	97	98.2	97	995		153.3
	.44	222	"			101							155.
	.45	220	"		100		50						156.7
	4.00	220	"	88	95	797		91	89.5	91	92.5		
	4.00	220	"	117		127		1225	50	124		878	Temp
	.03	220	"				50						162.
	.04	220	"										163.
	.09	220	"	50									164.7
	.13	220	"		70			71		70.5	61		169.2
	.14	220	"										171.3
	.17	220	"					50					171.7
	.17	220	"							69			
	.25	220	"								50		
	.26	220	"										179.
	.35	220	"	124		1214		127		129		888	Temp
				V									



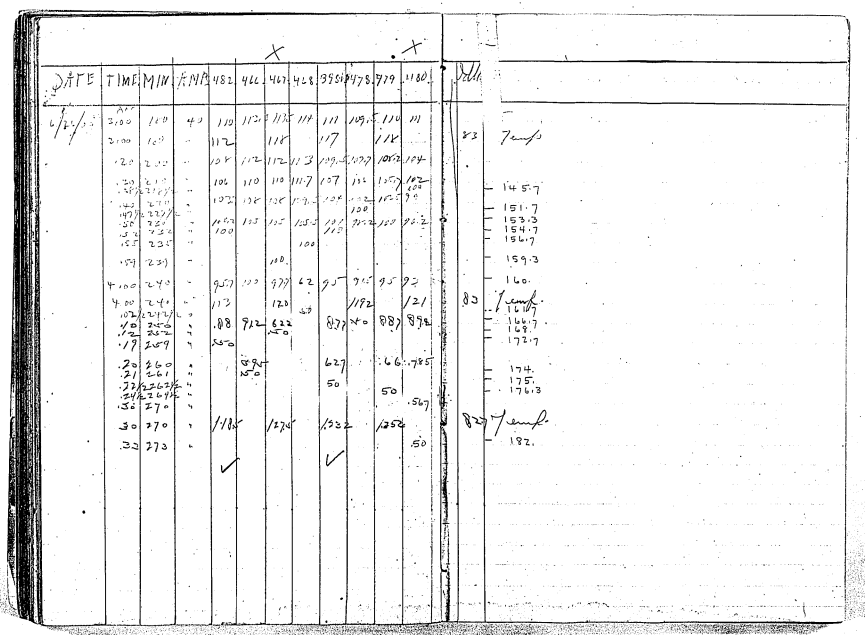
DATE	TIME	MIN	AMPS	412	416	417	420	424	427	429	430	1245	
				144	(142)	151	239	(150)					
6/25/09	4:25 PM	0	30	1216		1227		1282		1269		88	Temp
	5:25	60	"	1114		1125		1222		1222		88	"
	6:25	120	"	1135		117		1175		1175		89	"
	7:25	180	"	1108		1127		1190		1165		888	"
	8:25	240	"	1067		112		113		113		882	"
	9:55	300	"	107		1117		112		1122		89	"
	10:25	360	"	1072		112		1122		1127		902	"
	11:25	420	"	1088		112.7		112.7		113		91	"
	11:55	450	"	1.712	1347	1.722	1.72	1.722	1.692	1.71	1.712		V.D.
						Discharge							
6/25/09	PM 12.00	0	40	1.41	1.425	1.422	141	1.41	1.39	1.392	1.386		
	.04	4	"	1325	1332	1336	1332	1.352	1.337	1.33	1.333		
	.10	10	"	1302	1.312	1.31	1305	1.32	1.312	1.31	1.31		
	.20	20	"	1277	1.29	1.31	1282	1.296	1.28	1282	1.28		
	.40	40	"	1.25	1267	1282	1297	126	1.26	1247	1244		
	1.00	60	"	1222	1.23	1225	1232	1222	1.22	1217	1.217		
	1.00	60	"	113.		117		1165		117.		92.5	Temp
	.2.	80	"	121	1212	1217	122	1205	1207	120	1192		
	.40	100	"	1193	1197	1197	1207	1187	115	1167	1175		
	2.00	120	"	1177	1182	1182	1192	117.	1177	117.	1165		
	2.00	120	"	116		120		1194				727	Temp
	.20	140	"	1155	1172	117	113	1165	1152	1155	1177		
	.40	160	"	1193	1176	1233	1166	1197	1157	1195	1177		



DATE	TIME	MIN	AMPS	482	466	467	468	378	478	479	480
	PM.										
6/24/09	3.00	/80	70	1162	119	1135	1141	1107	1092	1185	106
	3.00	/80	"	/18		/23		129		1232	
	10	/70	"	1023	1135	113	1137	1072	1077	1057	104
	20	200	"	1165	111	1107	1122	1072	1045	1065	1022
	30	2.07½	"							100	
	30	210	"	1033	1092	108	1097	1035	1082	109	987
	37	217	"						100		
	40	220	"	102	107	106	1022	1017	99	100	102
	41	221	"							100	
	42	222	"					100			
	43½	222½	"	100							
	47	227	"				100				
	50	230	"	97	102	103	82	96	925	91	94
	57	237	"		100						
	59½	237½	"				50				
	400	240	"	88	99	18		90	50	90	895
	400	240	"	172			129	127		127	
	03	242	"				50				
	07	247	"	50							
	10	250	"		56			41		41	95
	10½	250½	"		50						
	12	252	"					50			
	12½	252½	"							50	50
	20	260	"								

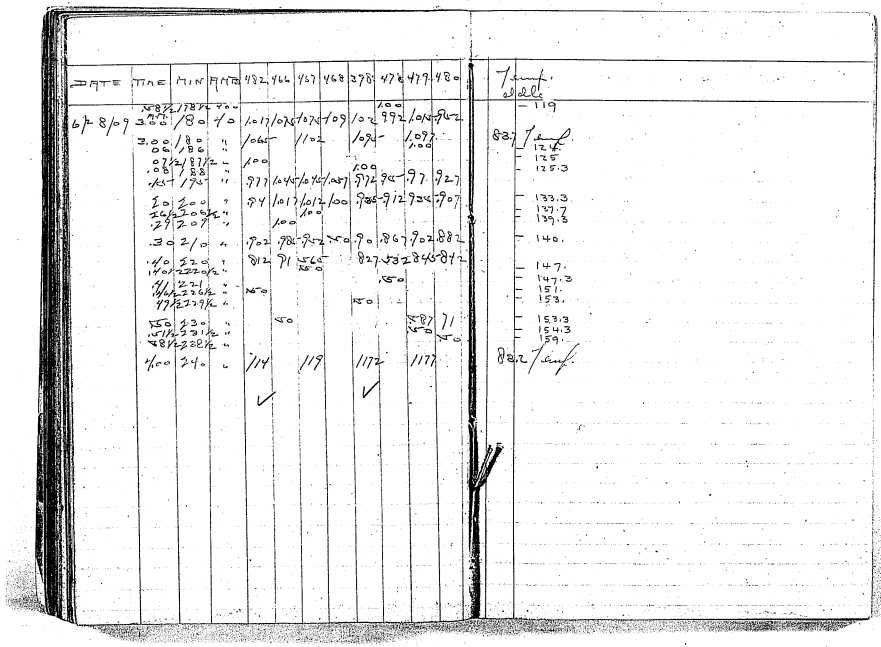
TEMP IN LBS	
932	Temp
	139.3
	144.7
	147.3
	148.
	149.
	151.3
	153.3
	159.
	158.3
	160.
	Temp
	161.3
	164.7
	167.
	168.
	169.3
	173.3

DATE	TIME	MIN	AMPS	482	466	467	468	398	476	479	480	Temp
4/25/09			Discharge	145	(155)	157	240		(157)			
	PM 455	0	30	1247	130		Low		237			94 Temp
	555	60	"	1162	122		227		232			91 "
	655	120	"	112	118		157		119			90 "
	755	180	"	109	115		115		116			85 "
	855	240	"	104	111		111		112			84 "
	955	300	"	100	114		118		1189			94 "
	1055	360	"	1053	1097		110		110			83 "
	1155	420	"	103.5	109.5		110		110.2			83 "
	1255	420	"	174	177.2	174.2	175	176	171	176.2	174.5	T. D.
				Discharge								
4/26/09	AM 1200	0	43	142	144	143	144.7	142.2	139.7	139	136.2	
	:09	4	"	132	133.7	132.5	133	133	133.5	132	133.5	
	:10	10	"	130	131.5	131	131.5	131.2	131	131	131	
	:20	20	"	126	129.5	129	129.5	130	129	129.5	126.5	
	:40	40	"	124	126	125	125.5	125.5	125.5	124.2	124	
	1:00	60	"	122	122.2	122.2	123	122	122.4	121.5	121	
	1:20	80	"	117.5		120.5		122		113		83 Temp
	:20	80	"	121	121	121	122	120.2	120.2	120	119.5	
	:40	100	"	119.7	120	120	121	119	119	117	117.5	
	2:00	120	"	117	118.2	118.2	119	117.5	117.5	117	115	
	2:00	120	"	109.5		114.5		114		115		83 Temp
	:20	140	"	116	118	117	117	115.7	115.5	115.7	113	
	:40	160	"	113	114.5	114.7	115.5	115.5	114.7	113	112	

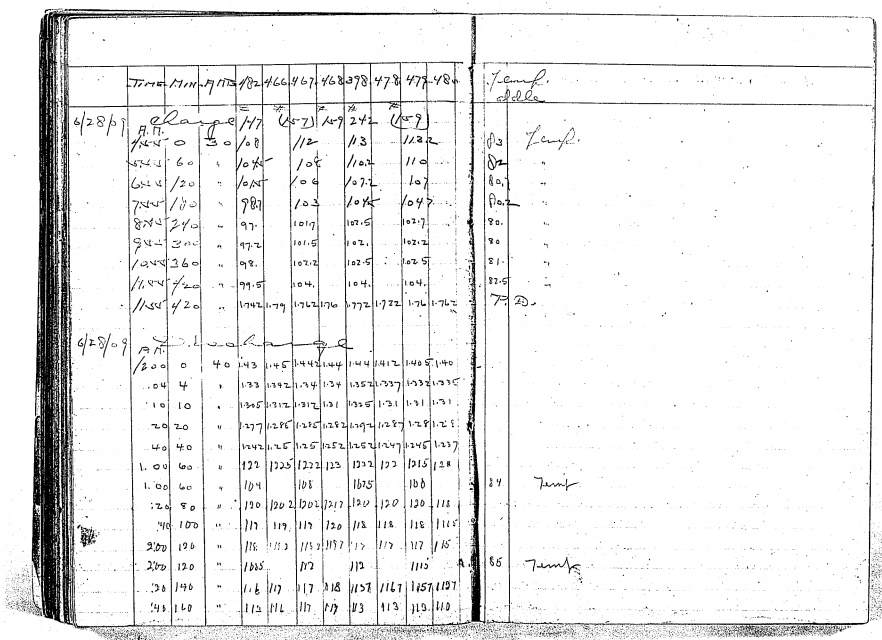


DATE	TIME	MIN	KNP	482	442	467	428	3956	478	779	1180	Delta	
	AM												
6/22/	2:00	1:10	40	110	112	115	114	111	109.5	110	111		
	2:00	1:10	"	112		118		117		118		83	Temp
	:20	2:30	"	104	112	112	113	109.5	107	106.5	104		
	:30	2:40	"	106	110	110	111.7	107	105	105.5	102		
	:50	3:00	"	102	106	106	107.5	104	102	102.5	100		145.7
	:40	2:50	"	102	106	106	107.5	104	102	102.5	98		151.7
	:47½	2:57½	"	104	108	108	109.5	106	104	104.5	100		153.3
	:50	3:00	"	104	108	108	109.5	106	104	104.5	100		154.7
	:52	3:02	"	100	104	104	105.5	102	100	100.5	96		156.7
	:55	3:05	"				100						
	:59	2:39	-			110							159.3
	4:00	2:40	-	95	100	100	102	98	96	96.5	93		160.
	4:00	2:40	"	113		120			1192		121	80	Temp.
	:02	2:42	"				83						164.7
	:10	2:50	"	.88	912	622		827	840	888	892		166.7
	:12	2:52	"			850							168.
	:17	2:57	"										172.7
	.20	2:60	"		898			627		666	785		174.
	.21	3:01	"		850								175.
	.22½	3:02½	"					50					176.3
	.24½	3:04½	"						50		567		
	.30	2:70	"										
	.30	2:70	"	1186	1276		1332		1252			82	Temp
	.32	2:72	"								50		182.
				✓				✓					

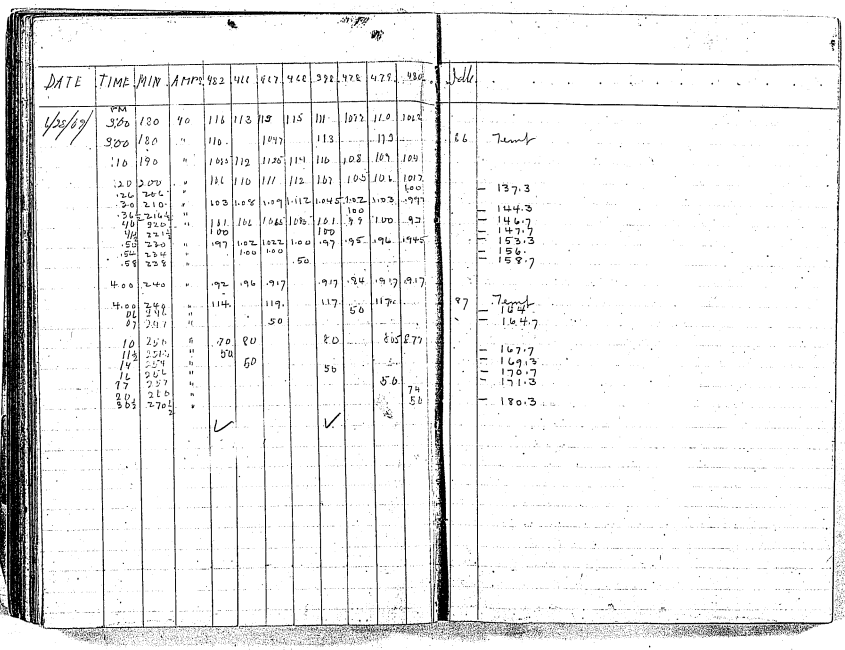
DATE	TIME	MIN	#478	#482	#466	#467	#588	#578	#478	#479	#480	Temp & Dew
	Discharge			1/6	(456)	1/8	2/1	(458)				
6/28/09	7:45	0	30	118.2		124.7		120.7		120.7		83.2 Temp.
	8:45	60	"	113		119		120.7		129.5		83 "
	9:45	120	"	107.7		114.2		110.5		115.5		84.2 "
	10:45	180	"	104		111		112		112.2		85.7 "
	11:45	240	"	104		108.2		108.7		109		86.5 "
	12:45	300	"	104.		109.		109.		109.5		87.5 "
	1:45	360	"	105		107.2		110		110.2		"
	2:45	420	"	122	125	123	123	123.7	120	123	123	"
	3:45	480	"	101		111		111		111		"
				T.D.								
				Total table = 6 hours over Saturday and Sunday charged								
6/29/09			Discharge									Temp.
	2:00	0	1/0	1247	1261	126	1245	127	1281	1242	1257	
	.04	1	"	1224	1234	122.2	123	1225	1277	122	122	
	.10	10	"	1207	1207	120	121.2	1205	1202	120	120	
	.20	20	"	1195	1196	119	119.4	1195	1187	1196	118	
	.40	40	"	118	118	1177	1184	1175	1172	1167	116	
	1.00	60	"	1167	1167	1166	1177	1165	1167	1164	114	
	1.00	60	"	98		96.7		97.7		98.2		85 Temp.
	1.20	80	"	1157	116	1162	1172	1165	1147	1145	127	
	.40	100	"	114	115	115	116	1135	1182	1132	1165	
	2.00	120	"	1117	114	1127	1171	1117	1112	1105	1015	
	2.00	140	"	102		104		103		103.		84.2 Temp.
	3.00	160	"	1092	1124	112	1136	1097	1082	1092	1032	
	.30	190	"								1.00	106
	.40	200	"	1057	1102	110	1110	1065	1042	1065	1022	



DATE	TIME	MIN	RATE	482	466	467	468	378	478	479	480
6/8/09	3:00	180	1/0	1011	1026	1074	1093	1002	992	1044	962
	3:00	180	"	1045		1102		1054		1087	
	3:00	180	"	1000							
	07/24	87½	"								
	08	88	"								
	1/4	1/4	"	977	1044	1044	1087	972	942	977	927
	2:00	200	"	994	1017	1017	1000	986	972	924	907
	2:00	200	"								
	2:00	200	"								
	2:00	200	"							

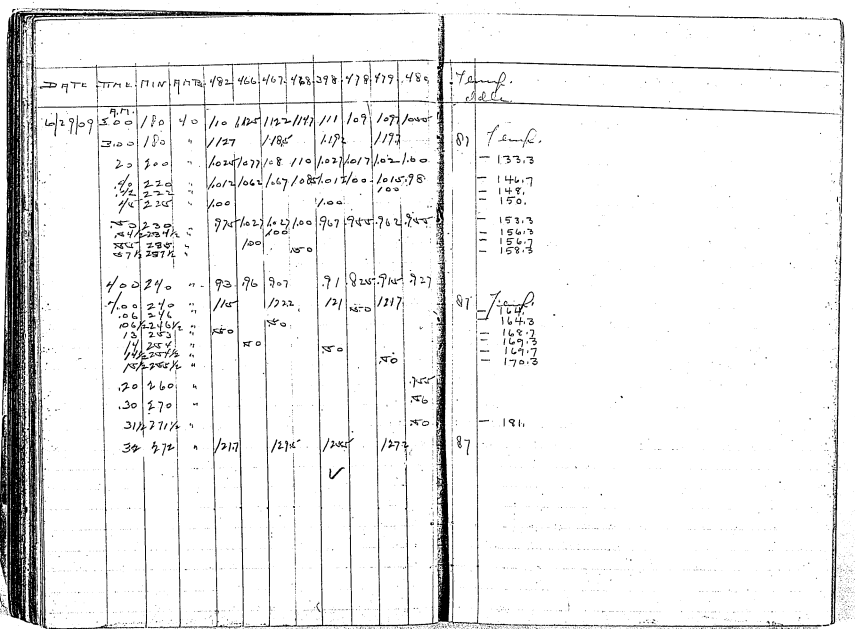


Time	Min	Min	482	466	467	468	398	478	477	480	Temp.
6/28/09	charge		147	(57)	149	242	(59)				Idle
P.M.											
7:45	0	30	108		112		113		1282	103	Temp.
6:54	60	"	104		105		102		110	82	"
6:21	120	"	104		106		107		107	80	"
7:45	180	"	987		103		104		1047	80	"
8:45	240	"	97.		101.7		102.5		102.7	80.	"
9:45	300	"	97.2		101.5		102.		102.2	80	"
10:45	360	"	98.		102.2		102.5		102.5	81.	"
11:45	420	"	99.5		104.		104.		104.	82.5	"
11:55	420	"	1.742	1.79	1.762	1.76	1.772	1.722	1.76	1.762	7:45 D.
6/29/09	A.M.	Cool	down								
8:00	0	40	1.43	1.45	1.442	1.44	1.44	1.412	1.405	1.40	
.04	4	"	1.33	1.392	1.34	1.34	1.352	1.337	1.332	1.335	
10	10	"	1.305	1.312	1.312	1.31	1.315	1.31	1.31	1.31	
20	20	"	1.277	1.285	1.285	1.282	1.292	1.287	1.28	1.282	
40	40	"	1.242	1.25	1.25	1.252	1.252	1.247	1.245	1.237	
1.00	60	"	122	1225	1222	123	1232	123	1215	1218	84 Temp
1.00	60	"	104		108		1075		108		
1:20	80	"	120	120 2	1201	1217	120	120	120	118	
40	100	"	117	119	117	120	118	118	118	1165	
2:00	120	"	116	117 3	1153	1157	117	117	117	115	
2:00	120	"	1165		117		113		1115		85 Temp
2:30	140	"	116	117	117	118	1157	1167	1157	1157	
3:45	160	"	112	114	117	117	113	113	113	110	



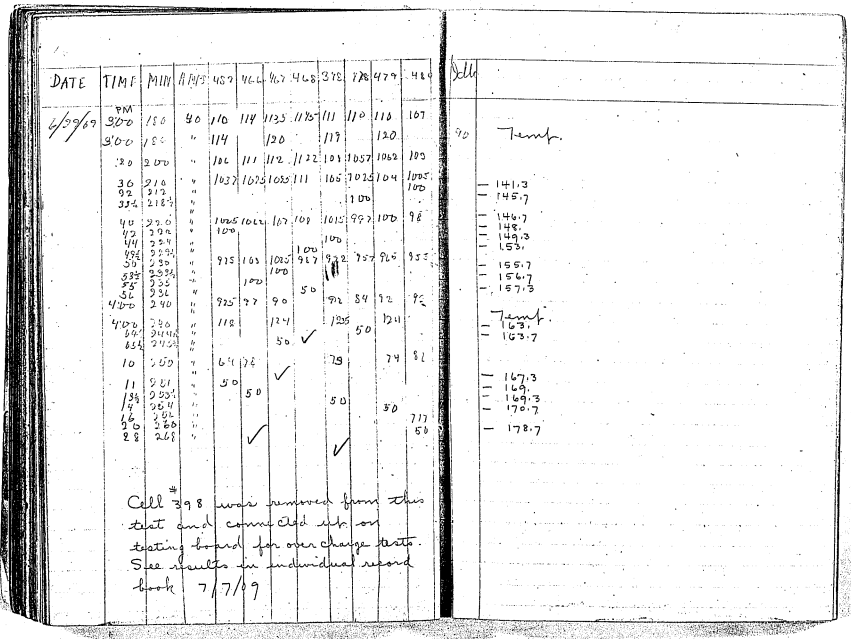
DATE	TIME	MIN	AMPS	982	411	467	468	398	478	479	480	Volts	
	PM												
4/25/69	3:00	180	40	116	113	15	115	111	1072	110	1012		
	9:00	180	"	110		1042		113		113		86	Temp
	:10	190	"	1033	112	1126	114	116	108	109	109		
	:20	200	"	112	110	111	112	107	105	106	1017		
	:26	206	"							100	600		137.3
	:30	210	"	103	108	109	112	1045	102	103	.997		
	:36	216	"						100				144.3
	40	220	"	111	101	1065	106	101	99	100	.92		146.7
	46	226	"	100				100					147.7
	:50	230	"	.97	102	1022	100	.97	.95	.96	.1745		153.3
	:54	234	"		100	100							156.
	:58	238	"				50						158.7
	4:00	240	"	.92	.96	.917		.917	.94	.917	.917		
	4:00	240	"	114		119		117		1176		87	Temp
	01	241	"						50				164
	07	247	"			50							164.7
	10	250	"	70	80			80		805	779		
	13	253	"	80									167.7
	14	254	"		60								169.3
	15	255	"					50					170.7
	17	257	"							80			171.3
	20	260	"								74		
	505	270	"								50		180.3
				✓				✓					

DATE	TIME	MIN	AMPS	482	466	462	422	398	375	419	480		
6/28/09		Recharge		148	(158)	160	243	(160)				211	
	PM 455	0	30	1215		1255		1325		1027		88	Temp.
	555	60	"	118		128		125		123		88	"
	655	120	"	112		118		121		126		227	"
	755	130	"	113		1141		116		112		87	"
	855	540	"	165		110		112		112		872	"
	955	300	"	104		110		1105		111		86	"
	1055	360	"	104		109		110		110		86	"
	1155	420	"	104		109		102		1107		866	"
	1255	480	"	172	1200	1722	173	1727	169	1722	1705	3477	
6/29/09	AM.	Discharge											
	1200	0	40	142	1482	142	1417	1417	388	1387	1387		
	.04	4	"	132	133	1332	132	1345	123	1324	1327		
	.10	10	"	1297	131	1302	130	1305	130	1302	1302		
	.20	20	"	127	1282	128	128	1272	128	1277	1281		
	.40	40	"	124	1252	124	1242	1245	124	1245	1247		
	1.00	60	"	122	1224	1222	1232	122	122	1232	1214		
	1.00	60	"	108	114		1132		114			866	Temp.
	.20	80	"	1205	120	1207	122	120	1202	1197	119		
	.40	100	"	1192	1194	1194	1202	1182	1187	118	1174		
	1.00	120	"	1175	1182	1182	1193	1167	1172	1167	1165		
	1.00	120	"	1104		116		1147		1162		867	Temp.
	.20	140	"	1147	1172	117	118	1152	1160	1152	114		
	.40	160	"	1132	1147	1144	1164	1144	113	113	1132		



DATE	TIME	MIN	ANTE	482	466	467	488	398	478	479	489	Temp.
6/29/09	300 PM	180	40	/10	/124	/127	/147	/11	/09	/079	/044	
	3:00	180	"	/127		/186		/192		/177		87 Temp.
	20	200	"	/024	/077	/08	/10	/027	/017	/02	/60	— 133.3
	.40	220	"	/012	/062	/07	/085	/017	/00	/015	/98	— 146.7
	.52	220	"							/00		— 148.
	4	220	"	/00				/00				— 150.
	50	230	"	974	/022	/02	/00	967	944	962	944	— 153.3
	.54½	230½	"			/00						— 154.3
	56	230	"			/00	/00					— 156.7
	57½	230½	"									— 158.3
	4:00	240	"	93	96	907		971	8265	942	927	
	7.00	240	"	/15		/222		/21	880	/217		87 Temp.
	.06	240	"									— 164.
	.06½	240½	"									— 164.3
	13	250	"	880		880						— 167.3
	14	250	"		80			880				— 169.3
	14½	250½	"									— 169.7
	15½	250½	"						880			— 170.3
	.20	260	"							955		
	.30	270	"							80		
	31½	271½	"								880	— 181.
	34	272	"	/217		/214		/205		/173		87
								✓				

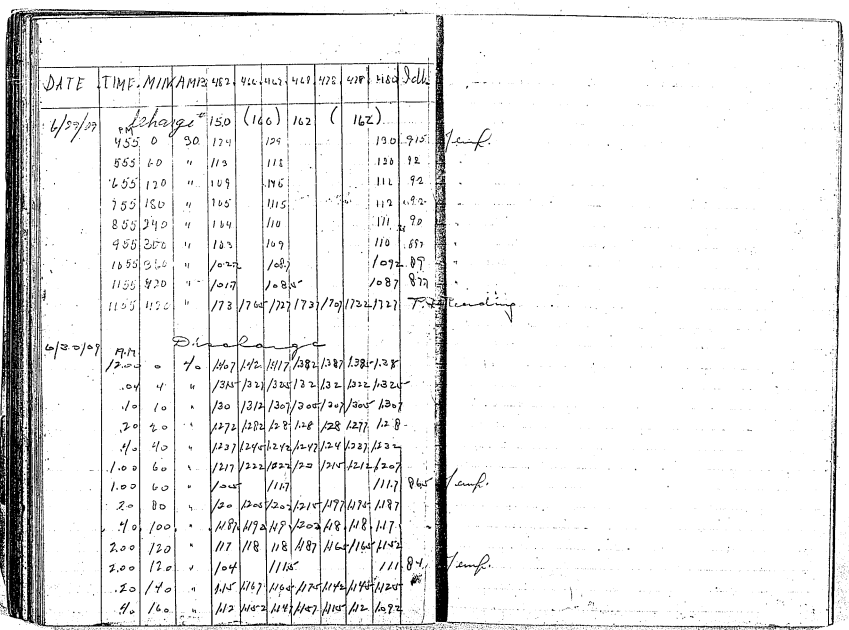
DATE	TIME	MINS	AIR TEMP	482	466	461	468	898	478	479	480	Temp. Obs.	
6/29/09	AM Surface			119	(147)	161	244		(161)				
	6 AM	0	80	1124		126		128		127		86.7	Temp.
	6 AM	60	"	114		120		1227		1217		86.7	"
	6 AM	120	"	109		1142		117		1162		86.7	"
	7 AM	180	"	1084	1117			113		1127		86.5	"
	8 AM	240	"	103.5		109.5		110.2		1102		86.5	"
	9 AM	300	"	102.5		108.5		109		109		86.7	"
	10 AM	360	"	102.5		108.5		108.5		108.5		87	"
	11 AM	420	"	103.2		109		109		109		87.5	"
	12 AM	480	"	1.72	1.77	1.735	1.742	1.742	1.76	1.73	1.735	90.0	
						Discharge							
6/29/09	PM 12:00	0	40	1.42	1.44	1.43	1.43	1.434	1.40	1.40	1.40		
	.04	4	"	1.32	1.332	1.332	1.33	1.35	1.33	1.33	1.33		
	.10	10	"	1.30	1.312	1.312	1.317	1.32	1.31	1.307	1.31		
	.20	20	"	1.277	1.287	1.282	1.28	1.292	1.257	1.282	1.282		
	.40	40	"	1.242	1.25	1.25	1.252	1.262	1.247	1.245	1.245		
	1.00	60	"	122	1222	1222	123	122	122	1217	121		
	1.00	60	"	1095		112		119		113		88	Temp
	.20	80	"	1065	1065	1065	122	120	120	120	115		
	.40	100	"	1132	1103	1152	120	118	1182	1182	117		
	2.00	120	"	118	1182	118	119	117	1172	1172	1157		
	2.04	120	"	115		117		117		119			Temp.
	.20	140	"	116	117	117	115	1155	1157	1157	1155		
	.40	160	"	1135	111	116	1162	114	118	119	111		



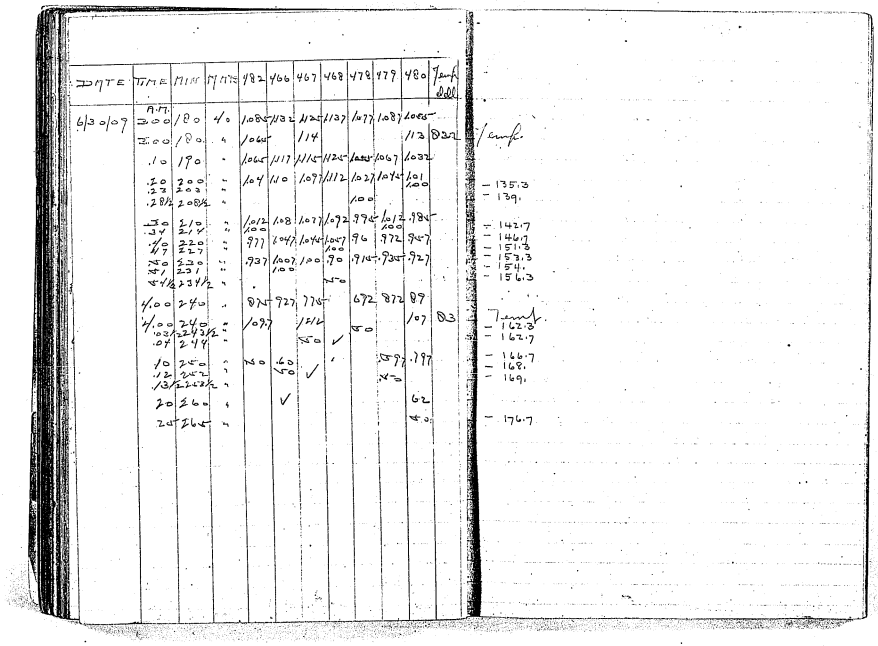
DATE	TIME	MIN	AMPS	457	464	467	468	378	178	479	480
	PM										
6/29/69	300	150	40	110	114	1135	1175	111	110	116	107
	300	150	"	114		120		119		120	
	120	200	"	106	111	112	122	101	1057	1062	100
	30	210	"	1037	1075	1035	111	106	1025	104	1005
	92	212	"								100
	334	2183	"						100		
	40	220	"	1025	1062	107	109	1015	997	100	98
	42	222	"	100							
	44	224	"					100			
	444	2242	"				100				
	50	230	"	915	103	1035	917	992	959	965	955
	532	2332	"			100					
	55	235	"		100		50				
	58	238	"					992	54	92	92
	400	240	"	925	77	90					
	400	240	"	118		124		1235		121	
	64	2404	"						50		
	654	2425	"			50	✓				
	10	250	"	64	78	✓		79		74	81
	11	251	"	50							
	134	253	"		50			50		50	
	14	254	"								717
	16	256	"								50
	20	260	"		✓			✓			
	28	268	"								

Cell 398 was removed from this test and connected with on testing board for over charge tests. See results in individual record book 7/7/69

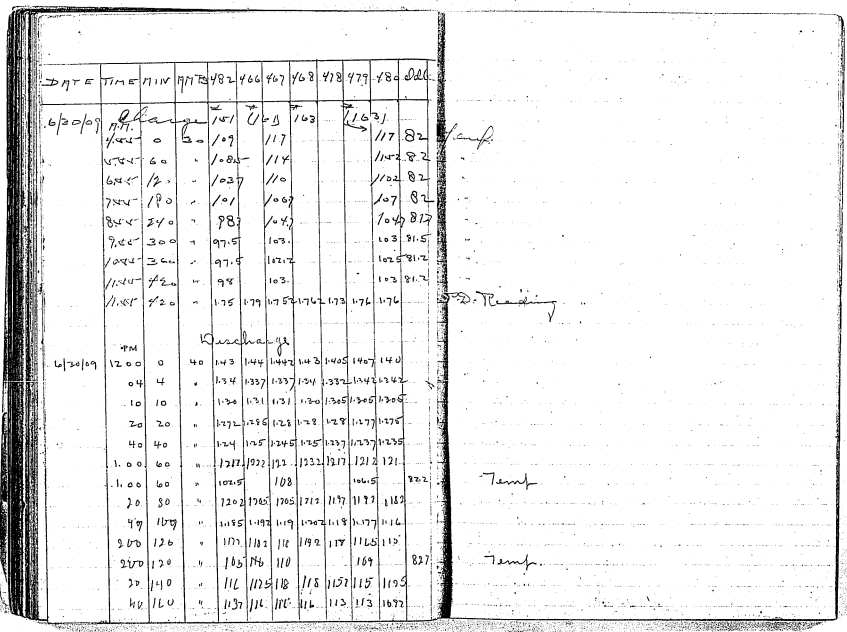
Cell	
90	Temp.
	— 141.3
	— 145.7
	— 146.7
	— 148.
	— 149.3
	— 153.
	— 155.7
	— 156.7
	— 157.3
	Temp.
	— 163.
	— 163.7
	— 167.3
	— 169.
	— 169.3
	— 170.7
	— 178.7



DATE	TIME	MIN	AMPS	462	426	462	478	478	468	Delta
6/29/09			Recharge	150	(160)	162	(	162)		
	PM 455	0	30	124		129			130	915 Temp.
	555	60	"	113		112			130	92 "
	655	120	"	109		106			111	92 "
	755	180	"	105		115			112	892 "
	855	240	"	104		110			111	90 "
	955	300	"	103		109			110	887 "
	1055	360	"	/022		/082			/092	897 "
	1155	420	"	/017		/085			/087	877 "
	1255	480	"	/013	/760	/727	/731	/709	/732	/727 Tapering
6/30/09	PM			Discharge						
	12:00	0	+/0	/1407	/472	/1117	/382	/387	/382	/328
	.04	4	"	/345	/322	/325	/32	/32	/322	/324
	.10	10	"	/30	/312	/307	/308	/307	/305	/307
	.20	20	"	/272	/282	/28	/28	/28	/277	/28
	.40	40	"	/237	/245	/252	/25	/24	/237	/232
	1.00	60	"	/217	/222	/227	/23	/214	/212	/207
	1.00	60	"	/20		/117			/117	965 Temp.
	.20	80	"	/20	/205	/202	/215	/197	/194	/187
	.40	100	"	/187	/192	/192	/202	/18	/18	/17
	2.00	120	"	/17	/18	/18	/187	/162	/162	/152
	2.00	120	"	/04		/1185			/111	84 Temp.
	.20	140	"	/15	/167	/164	/175	/142	/142	/125
	.40	160	"	/12	/162	/142	/147	/105	/12	/092



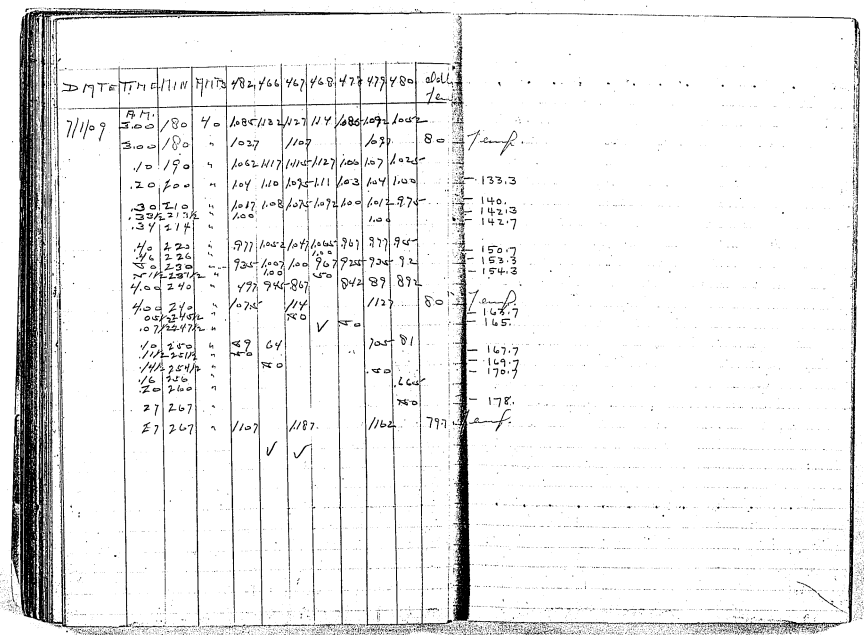
DATE	TIME	MIN	MIN	482	466	467	468	478	477	480	Junk bill	
6/30/07	A.M.	1:30	40	1.0854	1.132	1.124	1.127	1.077	1.087	1.0665		
	11:00	1:30	4	1.0665		1.114				1.12	8.32	1 cmf.
	.10	1:40	"	1.0665	1.117	1.115	1.125	1.085	1.067	1.032		
	.20	2:00	"	1.04	1.10	1.097	1.112	1.027	1.044	1.01/1.00		
	.22	2:02	"						1.00			— 135.3
	.28½	2:08½	"									— 139.
	11:50	2:10	"	1.012/1.00	1.08	1.077	1.072	.994	1.01/1.00	.984		
	.54	2:14	"									— 142.7
	12:19	2:20	"	.977	1.04½	1.044	1.047/1.00	.96	.972	.947		— 146.1
	.25	2:27	"									— 151.8
	1:40	2:30	"	.937	1.00½	1.00	.90	.914	.934	.927		— 153.3
	2:41	2:31	"									— 154.
	4:44½	2:31½	"				.70					— 156.3
	4:00	2:40	"	.874	.927	.776		.672	.872	.89		
	4:00	2:40	"	1.097		1.072				1.07	.83	1 cmf.
	4:03	2:43½	"				.60					— 163.3
	.07	2:44	"				✓					— 167.7
	10	2:50	"	.80	.60/.70	✓	"		.872	.797		— 166.7
	12	2:52	"									— 168.
	13/4	2:52½	"									— 169.
	20	3:00	"		✓					.62		
	24	3:04	"							.40		— 176.7



DATE	TIME	MIN	INT	482	466	467	468	478	479	484	000	
6/30/09	P.M.	Discharge		1.01	1.03	1.03			1.03			
	4:44	0	30	1.09	1.17				1.17	82		Temp
	5:44	60	"	1.08	1.14				1.142	82		"
	6:44	120	"	1.037	1.10				1.102	82		"
	7:44	180	"	1.01	1.06				1.07	82		"
	8:44	240	"	98	1.04				1.04	81.7		"
	9:44	300	"	97.5	103.				103	81.5		"
	10:44	360	"	97.5	102.7				102.5	81.2		"
	11:44	420	"	98	103.				103	81.2		"
	11:45	420	"	1.75	1.79	1.758	1.762	1.73	1.76	1.76		Lost Reading
	PM			Discharge								
6/30/09	12:00	0	40	1.43	1.44	1.442	1.43	1.405	1.407	1.40		
	04	4	"	1.34	1.337	1.337	1.34	1.332	1.342	1.342		
	10	10	"	1.30	1.31	1.31	1.30	1.305	1.305	1.308		
	20	20	"	1.271	1.286	1.28	1.28	1.28	1.277	1.275		
	40	40	"	1.24	1.25	1.245	1.25	1.237	1.237	1.235		
	1.00	60	"	1.217	1.222	1.22	1.222	1.217	1.212	1.21		
	1.00	60	"	102.5		108			106.5		822	Temp
	20	80	"	1.202	1.205	1.205	1.212	1.197	1.193	1.192		
	40	100	"	1.185	1.192	1.19	1.202	1.18	1.177	1.176		
	8:00	120	"	1.173	1.182	1.18	1.192	1.17	1.165	1.15		
	2:00	120	"	105	116	110			109		827	Temp.
	20	140	"	1.16	1.125	1.18	1.18	1.157	1.15	1.195		
	40	160	"	1.137	1.16	1.16	1.16	1.13	1.13	1.132		

DATE	TIME	MIN	AMPS	482	466	467	468	478	477	480	Volt	
6/30/07	PM 300	180	90	110	114	1135	1145	109	116	1057		
	300	180	"	108		1127			115		85	Temp
	20	200	"	1047	116	118	112	104	105	100		133.3
	36	210	"	102	108	103	110	1005 100	105	96		140.7
	31	211										
	34	214	"						100			142.7
	36	216	"	100								143.3
	40	220	"	965	103	1035	107	97	98	96		
	50	230	"	942	1005	1025	106	935	937	92		153.3
	51	231			100	103						154.
	57	237	"				56					158.
	400	240	"	90	94	97		86	90	90		
	400	240	"	112		1175			104			Temp
	05	245	"			58						163.3
	06	246	"				✓	50				164.3
	10	250	"	57	93				72	82		
	10	250	"	80		✓						167.
	13	253	"		50							168.7
	17	257	"						50			170
	20	260	"							64		
	25	265	"							50		176.7
					✓							

DATE	TIME	MIN	AMP	482	422	467	418	478	480	Del	
	Voltage			152	(162)	124	(	124)			
6/30/09	455	0		111		121		121	865		Temp
	555	60		114		118		119	865		"
	655	120		109		114		115	87		"
	755	180		1065		1125		1135	85		"
	855	240		101		111		112	88		"
	955	300		104		110		110	87		"
	1055	360		103		1025		1085	87		"
	1155	420		1042		108		1077	84		"
	1158	423		174	1777	174	1742	172	1747	1747	7th D. Reading
7/1/09	P.M.	Discharge									
	1200	0	40	1412	1427	142	1414	1272	1387	1388	
	04	4	"	1322	1337	1324	1332	1323	1339	1332	
	10	10	"	130	131	131	1305	1304	1307	1307	
	20	20	"	1272	1285	1271	1277	1268	1277	1278	
	30	30	"	124	1255	1247	124	1247	124	1246	
	100	60	"	1217	1222	1221	1227	1215	1215	1217	
	100	60	"	103		1092			109	82	Temp
	20	80	"	1202	1202	120	1202	1197	1195	1196	
	40	100	"	1181	1192	1172	1202	1187	118	1167	
	200	120	"	117	118	118	1187	1167	1162	1167	
	200	120	"	103		1097			1075	81	Temp
	20	140	"	1145	1167	1147	1175	1145	1144	1142	
	40	160	"	112	1162	1147	1147	112	1121	1087	



DATE	TIME	DIN	HITS	#82	#66	#67	#68	#77	#79	#80	abil.	
7/1/09	P.M.											
	3.00	180	40	1085	1122	1127	114	1086	1092	1062		
	3.00	180	"	1027		1107			1027		80	Temp.
	.10	190	"	1062	1117	1145	1127	1066	107	1025		
	.20	200	"	104	110	1075	111	103	104	1.00		133.3
	.30	210	"	1017	1.08	1075	1072	100	1012	974		140.
	.32½	213½	"	100					1.00			142.13
	.34	214	"									142.7
	.40	220	"	977	1055	1074	1065	961	977	94		150.7
	.46	226	"				1.00					153.3
	.50	230	"	934	1.00	1.00	967	925	934	92		154.3
	.54½	234½	"		1.00		950					
	4.00	240	"	497	954	867		842	87	872		
	4.00	240	"	1074		114			1137		80	Temp.
	.02½	242½	"			1.00						164.7
	.07½	247½	"				V	90				165.
	.10	250	"	89	64				105	81		167.7
	.11½	251½	"	90								169.7
	.14½	254½	"		90				90			170.7
	.16	256	"							1.00		
	.20	260	"									178.
	27	267	"						90			
	27	267	"	1107		1187			1162		797	Temp.
					V	V						

DATE	TIME	MINS	FEET	482	476	476	468	478	477	480	Add Temp	
7/1/09	Charge			483	(763)	464		(765)				
	PM	0	20	1110		1182		1117		79		Temp.
		40	"	1072		1147		1147		79		"
		120	"	1101		1072		1089		78		"
		180	"	972		1032		1044		78		"
		240	"	967		1021		1033		79.5		"
		300	"	98		103		1035		81		"
		360	"	997		1037		104		83.5		"
		420	"	101		106		1065		85		"
		480	"	1.74	1.785	1.75	1.76	1.72	1.752	1.752		H.P.D. Hexadecane
				Discharge								
7/1/09	PM	0	40	1.42	1.44	1.437	1.42	1.40	1.405	1.46		
	04	4	"	1.32	1.332	1.332	1.33	1.33	1.33	1.33		
	10	10	"	1.302	1.312	1.32	1.31	1.31	1.31	1.31		
	20	20	"	1.272	1.272	1.277	1.277	1.277	1.275	1.272		
	40	40	"	1.24	1.25	1.247	1.25	1.24	1.24	1.237		
	1.00	60	"	1.222	1.222	1.222	1.23	1.22	1.217	1.21		
	1.00	60	"	186		118			1105		867	Temp.
	20	80	"	1202	1205	1205	1213	120	110	1185		
	40	100	"	1192	1155	1185	1205	119	118	117		
	3.00	170	"	113	1182	1182	1192	118	117	1165		
	2.00	170	"	109		112			113		873	Temp.
	26	140	"	116	1162	1122	117	1157	1155	1197		
	46	160	"	114	115	112	1167	114	1137	111		

DATE	TIME	MIN	TIME	403	404	497	498	499	496	450	Tot.
	TM										
7/1/09	300	156	40	111	1145	1145	1165	1165	111	1082	
	300	150	"	1165		114			115		885
	20	200	"	1057	1105	1165	112	1165	1655	160	
	27	207	"							100	
	30	210	"	105	102	108	110	132	1022	997	
	31	214	"					100			
	34	214½	"						100		
	38	218½	"	100							
	48	220	"	991	1655	166	1075	982	99	965	
	49	229	"				100				
	50	230	"	952	1005	101	93	942	942	937	
	54½	234½	"		100	100					
	56	236	"	905			50				
	400	240	"	865	926	845		84	90	91	
	400	240	"	116		121	✓		120		88
	44	244½	"			50					
	46	246	"					50			
	49	249	"	50							
	10	250	"		62	✓			47	89	
	11	251	"		50				50		
	13	253	"								
	30	260	"		✓					66	
	34	264	"							50	

Temp

138.

142.7

144.3

145.7

152.7

153.7

157.3

Temp

163.

164.

166.

167.3

168.7

176.

Allo 404, 498 were connected in Endurance Section after this discharge for 50 mins.

DATE	TIME	MIN	AM/PM	402	426	463	463	478	479	480	484	1182	Delta	
7/1/09		Charge #		154	(124)	122	(	122	)	180		130		
	PM 455	0	"	120	125			122		95		86	297	Temp
	555	60	"	1125	125			121		108		99	905	"
	655	120	"	114	119			113		105		101	917	"
	755	180	"	111	112			116		107		105	927	"
	855	240	"	108	119			119		116		103	93	"
	955	300	"	102	112			1115		112		111	932	"
	1055	366	"	103	112			1189		119		112	93	"
	1155	426	"	107	113			113		1107		1121	793	"
	1155	426		1145	1145	1112	172	1102	1122	1112	1102	1092		P. W.
7/2/09	A.M.			Discharge										
	1200	0	1/2	1388	1402	1384	1397	1387	1362	1362	1387	136		
	04	4	"	132	1332	123	1324	1322	1324	1327	1327	132		
	10	10	"	1292	1302	130	1292	1291	1277	130	1284	129		
	20	20	"	1272	1282	128	1277	1274	1274	128	128	1272		
	40	40	"	124	125	1241	125	1242	124	124	1247	124		
	100	60	"	122	1222	122	1227	1217	1241	1217	122	1216		
	100	60	"	110		1162		116		120		11802	256	Temp
	20	80	"	1202	1205	1206	1216	120	1197	1182	1206	197		
	40	100	"	1182	1185	1192	120	1184	1178	1174	1192	178		
	200	120	"	1172	118	118	1187	117	1169	116	1182	1172		
	200	120	"	1102		1142		117		1122		122	965	Temp
	20	140	"	115	1167	1162	1172	1165	115	1137	1173	1157		
	40	160	"	112	1155	1147	1157	112	1125	1117	1155	114		

DATE	TIME	MIN	MIN	482	466	467	468	478	479	480	404	488	TEMP
													HOLE
7/2/09	12:17												
	3:00	/80	.90	/09	/132	/127	114	1.09	/097	/206	/114	/127	
	3:00	/80	"	/107		/119				/18	/126	/234	900
	.10	/73	"	/072	/12	/112	/127	/067	/08	/047	/128	/114	
	.20	200	"	/042	/10	/097	/112	/04	/042	/032	/107	/10	
	.30	210	"	/02	/082	/08	/097	/042	/027	/002	/07	/084	
	35	213							100	100			— 142.
	36	216		/00					00				— 144.
	38	218											— 145.3
	40	220		99	/042	/047	/06	98	992	98	/067	/062	
	42½	222½					100						— 151.7
	44	230		962	/042	/100	080	94	942	942	/047	/03	— 153.3
	44.3	233			100								— 155.3
	44½	234½					50					100	— 156.3
	45	235½											— 157.
	4:00	240		974	924	971		942	888	914	/012	947	
	4:00	240		/12		1227	✓		/21		1297	/30	89
	.02	243				50					100		— 162.
	.05	245						60					— 163.3
	.07	247		40									— 164
	.10	250			66				677	84	977	724	
	11½	251½			40	✓							— 167.7
	.13½	253½							50			60	— 169.
	14½	254½											— 169.3
	.20	260								69	802		
	.26½	266½			✓					50			— 177.7
	.30	270									767		
	30.23	747½									50		— 183.7
											✓	✓	

Cells 466, 467, 468, were removed from this test and connected with [illegible] on testing for overcharge tests. See results on individual record book 7/7/09.

DATE	TIME	MIN	MNTS	482	478	479	484	488	Adda			
7/2/09	Aft.					(167)						
	Aft.	0	0	117		127		133	131	87.7	Temp	
		60	"	132		120		128	126	85	"	
		120	"	104.7		132		121	118	84.7	"	
		180	"	102		107		118	116	84	"	
		240	"	105		107		114	112	84	"	
		300	"	100.5		105		113.5	112	84.5	"	
		360	"	101.5		105		113.	111.5	84.7	"	
		420	"	101.		105.5		113.	112.	85	"	
		480	"	1.72	1.717	1.732	1.707	1.717	1.715		TH D. Reading	
	PM			Discharge								
7/2/09	12:00	0	40	141	1.140	1.425	1.39	1.39	1.377			
	04	4	"	1.32	1.325	1.33	1.33	1.33	1.317			
	10	10	"	1.29	1.30	1.30	1.30	1.302	1.30			
	20	20	"	1.28	1.282	1.252	1.282	1.285	1.28			
	40	40	"	1.24	1.237	1.24	1.24	1.242	1.237			
	1.00	60	"	1.222	1.22	1.22	1.215	1.22	1.215			
	1.00	60	'	104		110		117	115	86.5	8	Temp
	1.26	86	"	120	120	1.130	1132	120	119			
	46	100	"	119	1185	118	113	118.2	1173			
	3.00	120	"	1.175	1.17	1.167	1.15	1.17	1.165			
	8.00	120	"	108.5		113.		121.	119.5	87.5		Temp
	20	140	"	1156	116	1157	1137	1155	1.155			
	40	160	"	113	1.113	1127	1.09	1.14	1.132			

DATE	TIME	MIN	AMPS	452	478	479	480	404	488	TEMP
	PM									Gilda
7/7/09	3.00	180	40	109	108	109	1045	1105	1102	
	3.08	180	"	111		111		115	123	88
	20	200	"	1042	163	104	1605 100	107	1072	
	91	201	"							
	28½	2088	"		100					
	30	210	"	101	99½	1005 100	98	104	7.097	
	91	211	"							
	35½	2154	"	100						
	40	225	"	92	96.5	96.5	95	100	1012 100	
	43	228	"							
	50	236	"	937	92	92.5	917	98	945	
	401	240	"	78	54	82	825	81	837	
	4.00	240	"	115		120		130	127	88.6
	01	241	"		56					
	02	242	"						58	
	04	2444	"	56						
	08	248	"			56				
	16	256	"				62	50		
	19	259	"				50			
								✓	✓	

Temp.
- 134.
- 139.
- 140.7
- 142.3
- 146.7
- 148.7

Temp.
- 160.7
- 161.3
- 163.
- 165.3
- 166.7
- 169.3

DATE	TIME	MIN	AMPS	482	478	479	480	404	488	Jolt	
7/2/09		Charge #		156		(168)		182	132		
	PM 555	0	30	119		1245		122	130	852	7 amps
	655	60	"	112		1162		125	133	90	"
	755	120	"	1115		1145		124	122	105	"
	855	180	"	108		114		121	120	967	"
	955	240	"	1045		110		118	117	90	"
	1055	300	"	102		108		116	115	89	"
	1155 PM	360	"	102		1082		116	1142	89	"
7/2/09	1255	420	"	1022		1082		116	1142	882	"
	1255	420	"	124	1246	1246	1217	122	1212		P. 13
7/2/09	A.M.		Discharge								
	1.00	0	40	1407	1407	1480	1387	1387	1377		
	.04	4	"	1332	1327	1330	1330	1332	1324		
	.10	10	"	1330	1307	1331	1312	1311	1305		
	.20	20	"	1275	1278	1282	1282	1278	1270		
	1.40	40	"	1247	1247	1242	1247	1242	1237		
	2.00	60	"	1217	1215	1215	1212	1217	1211		
	2.00	60	"	1052		1145		1182	1172	872	7 amps
	.20	80	"	1202	1201	1197	1192	1200	1195		
	1.40	100	"	1192	1185	1182	1172	1187	1177		
	3.00	120	"	1175	1171	1167	1165	1175	1162		
	3.00	180	"	1036		1117		1201	1182	892	7 amps
	.20	190	"	1182	1164	1164	1127	1147	1144		
	1.40	160	"	1127	1127	1127	1087	1114	1121		

Section was not put on @ PM 4.55 by mistake but went on @ PM 5.55 and will charge 7 hrs until 12.55 7/3/09

DATE	TIME	MIN	PHIT	482	478	479	480	404	488	adds
	AM									
7/3/09	4:00	/80	40	/092	/026	/073	/06	/117	/104	
	4:00	/80	"	/026		/11		1217	/18	82
	.10	/90	"	/067	/066	/074	/038	/097	/084	
	.20	200	"	/047	/046	/087	/017	/088	/07	
	.28	208					100			
	30	210	"	/017	/015	/026	994	/057	/052	
	36	216	"		600					
	37	217	"	/00						
	38½	218½	"			100				
	42	222	"	98	977	987	967	/02	/02	
	47	227	"					100	100	
	50	230	"	94	94	942	937	974	974	
	500	240	"	877	845	894	89	884	862	
	500	240	"	/027		/127		1232	1184	80
	08	248	"		33					
	09	249	"		0				80	
	/10	250	"	617		742	77	614		
	/11½	251½	"	40				150		
	/15½	255	"				80			
	.20	260	"					82/2		
	.20½	260½	"					80		
								✓	✓	

Temp

— 138.7

— 144.
— 144.7
— 145.7

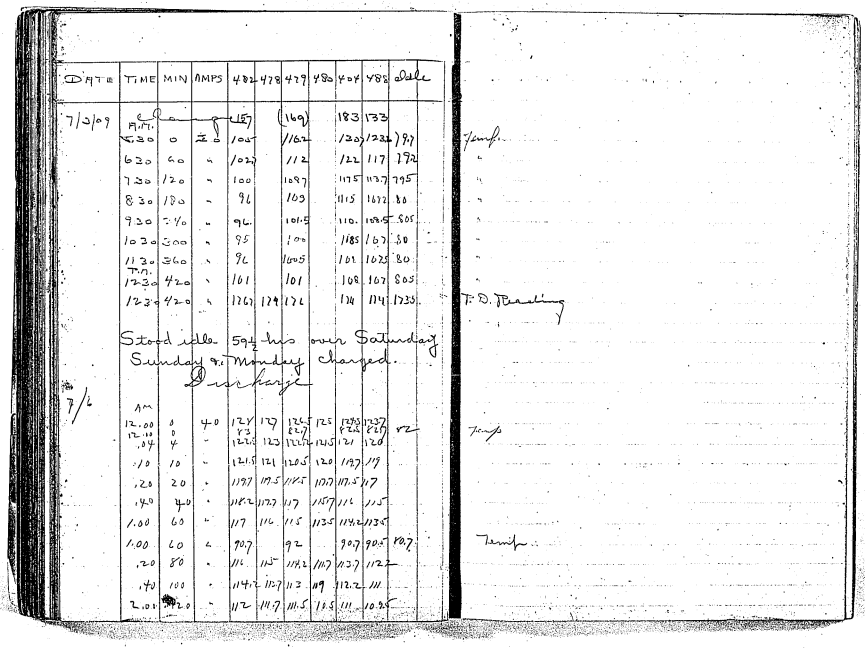
— 151.3

Temp

— 165.3
— 166.

— 167.7
— 170.

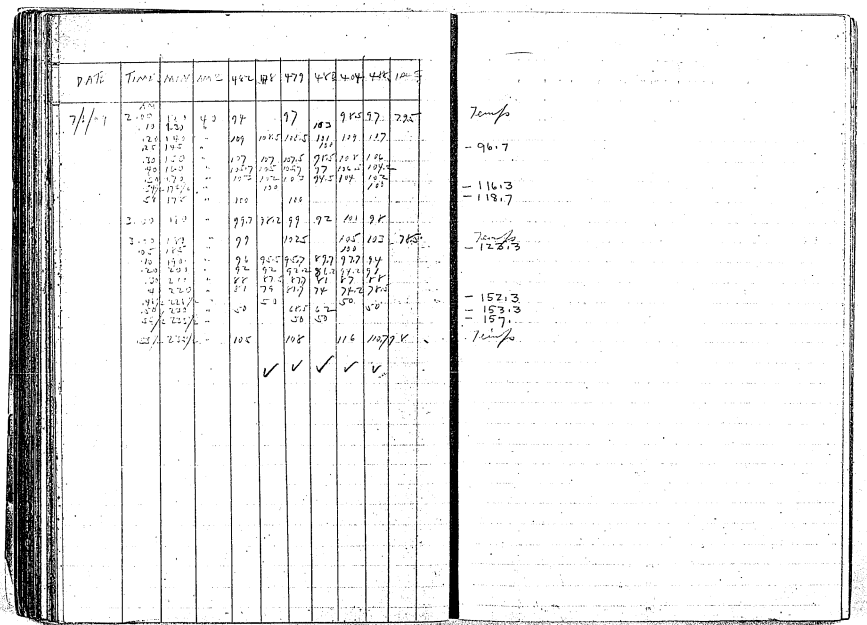
— 173.7



DATE	TIME	MIN	AMPS	482	478	477	480	404	488	Cable
7/2/09	6 P.M.	0	25	165		(169)		183	133	
	6.30	0	25	105		116.2		120	123.2	87 Temp.
	6.30	60	"	102.2		112		122	117	122 "
	7.30	120	"	100		109.2		117.5	113.7	79.5 "
	8.30	180	"	96		105		111.5	107.2	80 "
	9.30	240	"	96		101.5		110.	105.5	80.5 "
	10.30	300	"	95		100		108.5	101.7	80 "
	11.30	360	"	96		100.5		101	102.5	80 "
	12.30 A.M.	420	"	101		101		108	107	80.5
	12.30	420	"	176.1	174	176		174	174	173.5 F. D. Brasling

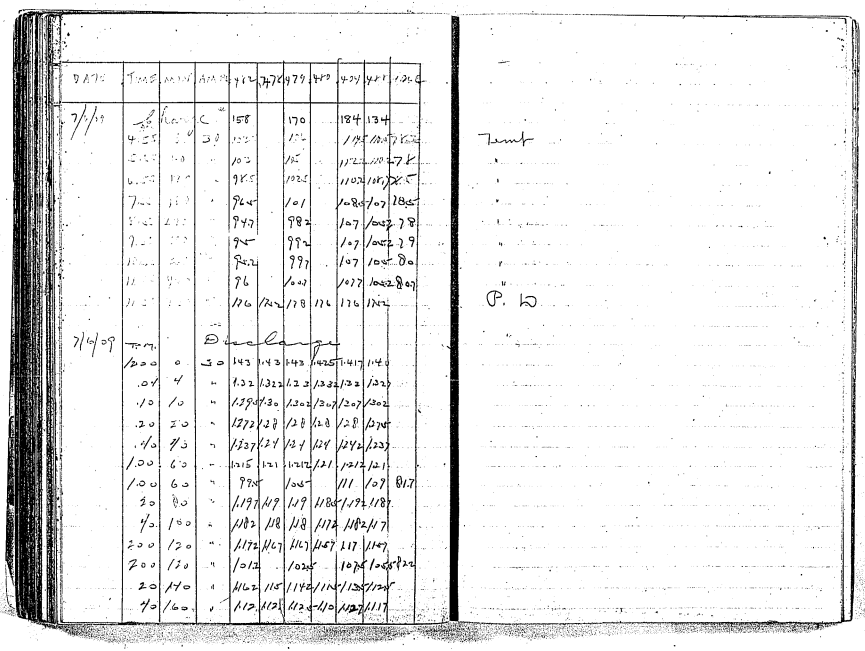
Stood idle 5 9½ hrs over Saturday Sunday & Monday charged. Discharge

7/6	AM										
	12.00	0	40	124	127	126.5	125	125.5	123.7		
	12.10	0		83		82.7		82.5	82.7	82	Temp
	.04	4	"	122.5	123	122.7	123.5	121	120		
	.10	10	"	121.5	121	120.5	120	119.7	119		
	.20	20	"	119.7	119.5	119.5	119.7	119.5	119.7		
	.40	40	"	118.2	118.7	118	118.7	118	118.5		
	1.00	60	"	117	116	115	117.5	116.2	116.5		
	1.00	60	"	90.7		92		90.7	90.5	90.7	Temp
	.20	80	"	114	115	114.2	116.7	113.7	112.2		
	.40	100	"	114.2	113.7	113	114	112.2	111		
	2.00	120	"	112	111.7	111.5	113.5	111	110.5		



DATE	TIME			482	484	479	478	480	481	483
7/1/-1	2:00	1:1	42	94		97	103	95.5	97	735
	:13	1:30	"				120			
	:20	1:40	"	109	108.5	110.5	131	109	117	
	:25	1:45	"				120			
	:30	1:50	"	107	107	110.5	95.5	106.5	106	
	:40	1:60	"	107.7	105.5	107.7	97	106.5	109.2	
	:45	1:65	"	105	104	107.2	99.5	104	107.2	
	:50	1:70	"		103				103	
	:59	1:75	"	100		106				
	2:00	1:80	"	99.7	97.2	99	92	101	98	
	2:03	1:83	"	99		102.5		105	103	760
	:05	1:85	"					100		
	:10	1:90	"	96	95.5	97.7	87.7	97.7	99	
	:20	2:00	"	92	92	93.2	82.2	92.2	94	
	:25	2:05	"	88	87.5	89	82	87	89	
	:40	2:20	"	81	79	81.7	74	78.2	780	
	:45	2:25	"							
	:50	2:30	"	50		60.5	62	50	50	
	:55	2:35	"			50	50			
	3:00	2:40	"	105		108		116	107.2	
					✓	✓	✓	✓	✓	

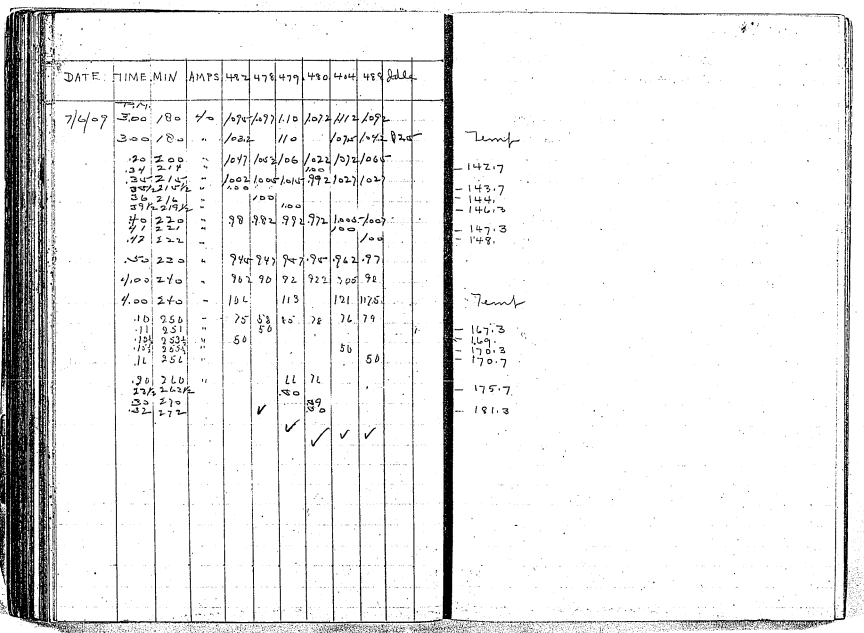
Temp
- 96.7
- 116.3
- 118.7
Temp
- 128.3
- 152.3
- 153.3
- 157.
Temp



DATE	TIME	MIN	AIR								
7/1/09			C	158		170		184	134		
	4:25	30									
				103		115					
				98.5		1025		1021	1087		
				96.4		101		1086	107	1865	
				94.7		987		107	1052	78	
				95		992		107	1052	29	
				96.2		997		107	1052	80	
				96		1001		1077	1052	803	
				176	182	178	176	176	182		
7/4/09				Discharge							
	0:00	0	50	143	143	143	1425	1417	140		
	.04	4	"	132	1322	132	1332	132	1323		
	.10	10	"	1294	130	1302	1307	1307	1302		
	.20	20	"	1273	128	128	128	128	1276		
	.40	40	"	1237	124	124	124	1242	1237		
	1.00	60	"	1215	121	1212	121	1212	121		
	1.00	60	"	994	1005		111	107	1017		
	30	80	"	1197	119	119	1184	1192	1187		
	40	100	"	1182	118	118	1172	1182	117		
	2:00	120	"	1172	117	117	1167	117	1167		
	2:00	120	"	1012		1024		1075	1052		
	20	140	"	1162	115	1148	1147	1157	1157		
	40	160	"	1132	1121	1124	110	1127	1117		

Turb

" P. 10



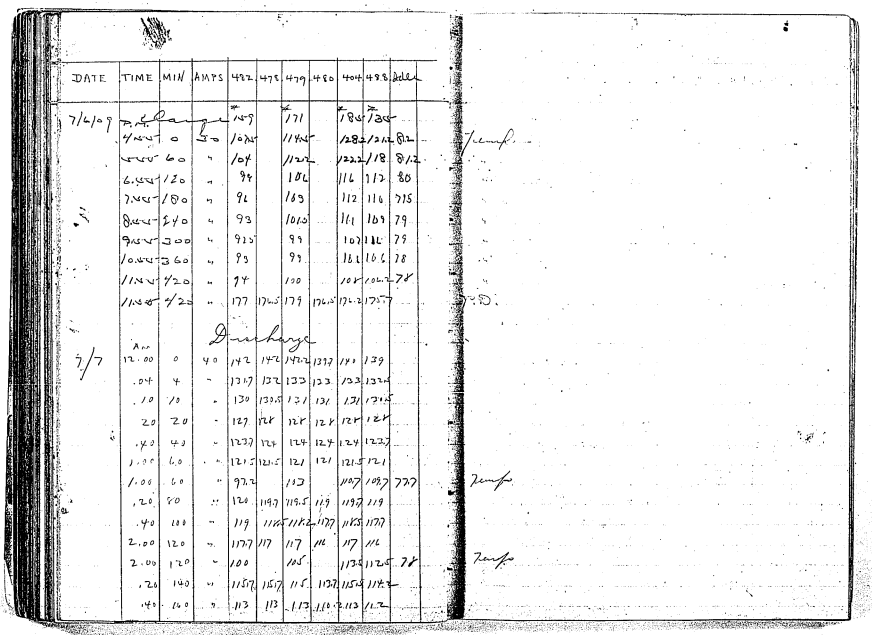
DATE	TIME.MIN	AMPS	482	478	479	480	484	488	Bubble
7/6/07	3:00	180	4/0	/094	/097	/110	/072	/112	/092
	3:00	180	"	/082		/10		/075	/042 /824
	.20	200	"	/047	/052	/06	/022	/072	/064
	.34	214					.100		
	.34	214	"	/002	/005	/014	998	702	/102
	.46	214	"	.100					
	.56	214	"		.100				
	3:59	219	"			.100			
	4:00	220	"	98	982	992	972	1.005	/007
	4:00	220	"					.100	
	.12	132	"						/00
	.50	220	"	946	943	947	946	942	947
	4:00	240	"	962	90	92	922	905	98
	4:00	240	"	104		113		121	1178
	.10	250	"	75	58	80	78	76	79
	.11	251	"		50				
	.12	251	"	50					
	.13	253	"					50	
	.14	254	"						50
	.30	270	"			77	72		
	.32	272				80			
	.33	270				89			
	.52	272			✓	80	✓	✓	✓

Temp

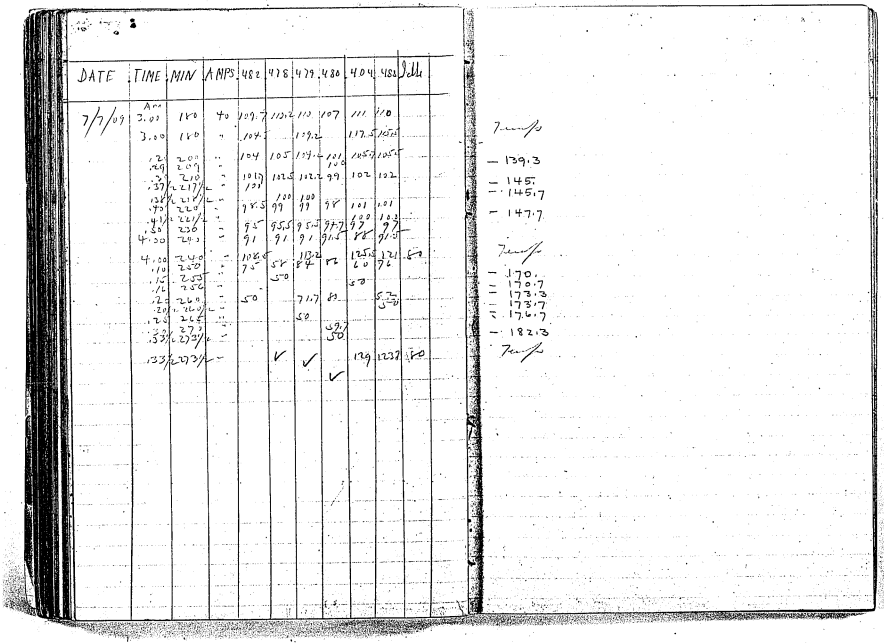
142.7
143.7
144.
146.3
147.3
148.

Temp

167.3
169.
170.3
170.7
175.7
181.3



DATE	TIME	MIN	AMPS	472	475	479	480	404	498	Bell	
7/4/09	P.M. Charge					171		1865	1364		
	4 PM	0	50	1045		1145		1282	1212	82	Temp.
	5 PM	60	"	104		1122		1222	118	81.2	"
	6 PM	120	"	94		106		116	113	80	"
	7 PM	180	"	91		103		112	116	715	"
	8 PM	240	"	93		1015		111	109	79	"
	9 PM	300	"	913		99		107	112	79	"
	10 PM	360	"	93		99		108	106	78	"
	11 PM	420	"	94		100		107	1062	78	"
	12 PM	480	"	177	176.5	179	176.5	176.2	175.7		G.E.
				Discharge							
7/7	AM										
	12.00	0	40	142	142	142.2	137.7	141	139		
	.04	4	"	131.7	132	133	133	133	133.4		
	.10	10	"	130	130.5	131	131	131	131.5		
	.20	20	"	127	128	126	126	126	126		
	.40	40	"	123.7	124	124	124	124	123.7		
	1.00	60	"	121.5	121.5	121	121	121.5	121		
	1.06	66	"	97.2		113		107	108.7	77.7	Temp.
	1.20	80	"	120	119.7	115.5	119	119	119.7		
	1.40	100	"	119	116	117.2	117	115	117.7		
	2.00	120	"	117.7	117	117	116	117	116		
	2.00	120	"	100		105		113	112.5	78	Temp.
	2.20	140	"	115.7	115.7	115	113.7	115	113.2		
	2.40	160	"	113	113	113	113	113	113		



DATE	TIME	MIN	AMPS	482	478	479	480	404	481	Jelly
7/7/09	3.00	180	40	109.7	110.2	110	107	111	110	
	3.00	180	"	109.2		109.2		112.5	110.5	
	.2	2.00	"	104	105	104	101	105.5	105.5	
	.69	2.09	"				100			
	.39	2.10	"	101.7	102.5	102.2	99	102	102	
	.33	2.17	"	101						
	.28	2.21	"							
	.75	2.28	"	98.5	99	100	98	101	101	
	.41	2.29	"			99		100	100	
	.30	2.30	"	95	95.5	95.5	94.7	97	97	
	4.30	2.00	"	91	91	91	91.7	95	97.5	
	4.00	2.40	"	108.5		108.2		115.5	121	69
	.10	2.50	"	75	84	84	82	60	126	
	.15	2.55	"		50			60		
	.12	2.56	"							
	.2	2.58	"	50		71.7	69		55	
	.20	2.58	"						50	
	.26	2.25	"			58				
	.22	2.23	"				69.7			
	.33	2.23	"				50			
	.33	2.03	"		✓	✓		139	123.7	60
							✓			

7 min/s

— 139.3

= 145.

= 145.7

— 147.7

7 min/s

— 170.

= 170.7

= 173.3

= 173.7

= 176.7

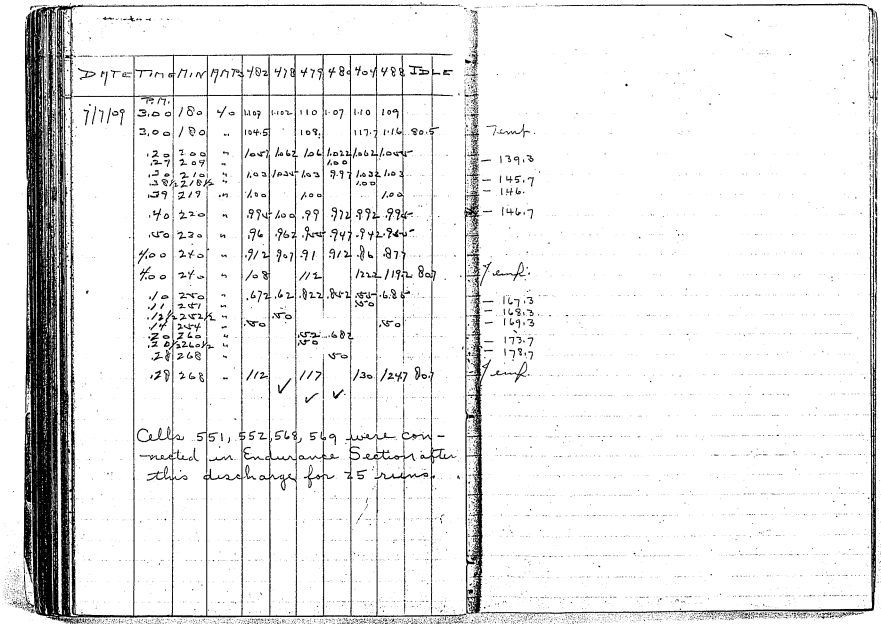
— 182.3

7 min/s

DATE	TIME	MIN	AMPS	#12	#11	#15	#10	#9	#8	#7	#6	#5
7/7/09	6 hour run		110	(	172	)	188	132				
	4.55 AM	0	30	110		1167		1275	1245	98.5		
	5.55	60	"	1067		1127		1227	1123	98.5		
	6.55	120	"	1027		1097		1177	1112	98.5		
	7.55	180	"	987		1057		1135	1147	98.5		
	8.55	240	"	967		1025		1117	1107	98.5		
	9.55	300	"	947		1007		1097	1087	97.2		
	10.55	360	"	947		1002		1097	1087	98.5		
	11.55	420	"	967		1014		1097	1087	98.5		
	11.55	420	"	1162	1176	1284	1174	1247	1247			
7/7/09	TEN.			Breakage								
	2.00	0	40	140	140	140	139	1382	1282			
	.04	4	"	132	1327	133	1334	1332	1327			
	.10	10	"	130	1305	1307	1312	131	1307			
	.20	20	"	1270	128	1280	1282	128	1277			
	.40	40	"	124	1242	1242	1242	1242	1237			
	1.00	60	"	1215	1215	1215	1212	1215	1207			
	1.00	69	"	100		164		110	111	80		
	.25	80	"	1202	120	1157	1172	1192	1187			
	.40	100	"	1197	1187	1182	1177	1182	1172			
	2.00	120	"	1177	1172	117	1167	1162	1152			
	2.00	120	"	103		102		1137	1127	79.7		
	.24	144	"	1158	1155	1152	1152	1152	1137			
	.40	160	"	1135	1137	1113	1111	1132	1112			

7 comp.

T.D.



DATE	TIME	MIN	AMPS	482	478	479	480	407	488	IDLE
	PM.									
7/7/09	3.00	180	4/0	1107	1102	110	1.07	110	109	
	3.00	180		1045		109		117.7	116	80.5
	.20	200		1047	1062	106	1022 1.00	1062	1044	
	.27	207								
	.30	210		1.03	1024	103	9.97	1032 1.00	1.03	
	.38	218								
	.39	219		1.00		1.00			1.00	
	.40	220		994	1.00	.99	972	992	994	
	.50	230		.96	.962	944	947	942	940	
	1.00	240		912	907	91	912	86	877	
	1.00	240		1.08		112		1222	1172	807
	.10	250		.672	.62	.822	.842	850 850	.686	
	.11	251								
	.13	253			850				.850	
	.14	254		850						
	.20	260				852 850	.682			
	.28	268					850			
	.28	268		112	✓	117		130	1247	807
						✓	✓			

Temp.
— 139.3
— 145.7
— 146.
— 146.7
— 167.3
— 168.3
— 169.3
— 173.7
— 178.7
Temp.

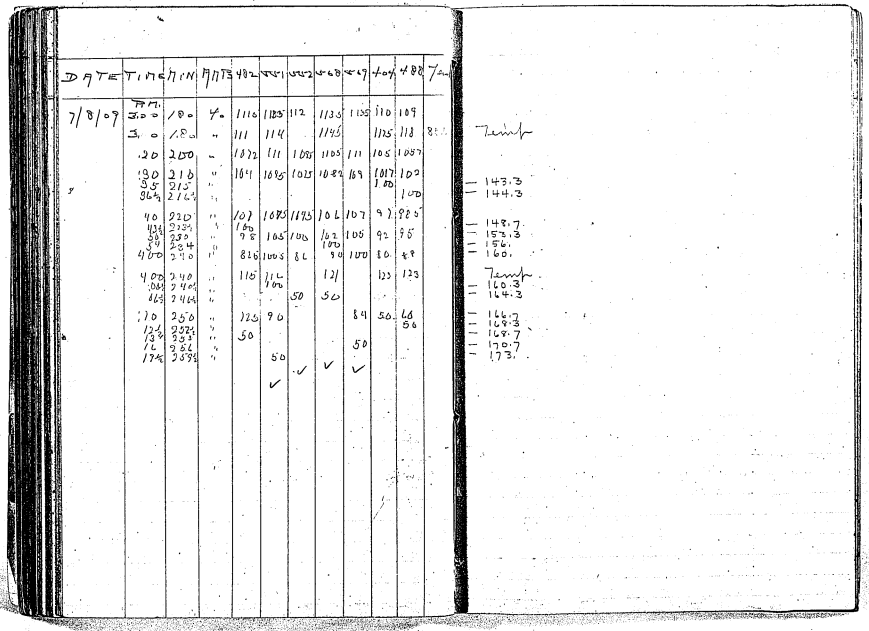
Cells 551, 552, 568, 569 were connected in Endurance Section after this discharge for 75 runs.

DATE	TIME	MIN	AMPS	482	551	552	568	569	478	479	480	404	487	TEMP	
														Jobs	
	Charge			161	(71)		(71)			(173)		187	137		
7/7/09	PM 4.55	0	30	111.5	80.7		80.7			1072		129.5	125.7	81.	Temp
	5.55	60	"	109	87		8L			115		124	122	815	"
	6.55	120	"	105	92		92			111		121	119	82	"
	7.55	180	"	102	94		95			107		112	116	82	"
	8.55	240	"	100	96		97			107		110	115	82	"
	9.55	300	"	100	97		98			105		110	113	82	"
	10.55	360	"	98.5	95.5		99			104		112	111	815	"
	11.55	420	"	97.5	99.5		100	ac		1027		111.5	110.5	80.5	"
	11.55	420	"	171	175.7	177	174	174	174	174	175.5	174	174		8.10
	AM			Discharge											
7/8	12.00	0	40	143	147	147	142	142	142	141		140	140	132	
	.04	4	"	132	133	132.5	133	133	133	132		132	132	130.5	
	.10	10	"	130	130.5	130.2	130.5	130.5	131	130.2		131	130.5	132.2	
	.20	20	"	127.5	128	127.5	128	128	128	128		128	128	128	
	.40	40	"	124	124.5	124.2	124.2	125	124.5	124		124	124	122.7	
	1.00	60	"	122	123	122.5	123	122.7	122.2	122		121.7	122.7	124	
	1.00	60	"	101.5	103.5		104			106		112	113	80	Temp
	.20	80	"	120.5	121	121	121	121.5	120.5	120		119.7	119.7	117	
	.40	100	"	119.5	121	119.7	120	120.2	119.5	119.2		118	118	117.7	
	2.00	120	"	118	119	118.5	119	119.5	118	118.5		116	117	116.7	
	2.00	120	"	122	120.5		120.5			117			116	116	79.2 Temp
	.20	140	"	116	117	116.5	117.5	118	116	116.5		114	115	114	
	.40	160	"	114	115.7	115	116	116	114.2	114.7		111	113	112	

DATE	TIME	MIN	AMPS	482	551	552	568	567	478	479	480	484	488	TEMP Outlet	
7/8/39	3:00	120	90	110.5	114	113	113.7	114.5	111.7	110.5	111.7	112.2	109		
	2:00	180	"	113.7	113.2		113.7			112.5	111.7	111.7	110.5	76.7	Temp
	1:00	120	"								112.5		110.7		
	1:20	200	"	106	111.5	113	111	112	107.5	106.2	112.5	106	105.5		
	1:40	220	"	102	110	106.2	107	106.2	104.5	103	110	103	102.5		— 140
	2:00	240	"	101.5	108.5	106.5	107.5	105	103	100	108.5	101	100		— 146.7
	2:20	260	"	100											
	2:40	280	"							100					— 151.
	3:00	300	"	96.2	102.2	104	104.5	103	97	96	96.5	98.2	95.5		— 159.
	3:20	320	"			100	100								
	3:40	340	"	94.5	102	98	99	104	102	91	91	89	89		
	4:00	360	"	102.5	110		111.5			111.7		112.2	112.2	76.5	Temp
	4:20	380	"		100										— 165.7
	4:40	400	"	82.2	92	91.5	88	100	71.2	84	83	83	66		— 166.7
	5:00	420	"						50						— 169.3
	5:20	440	"				58						59		— 169.7
	5:40	460	"			58									— 170.
	6:00	480	"	58											— 170.3
	6:20	500	"		82.2		80			54	70				
	6:40	520	"		✓					50					— 174.3
	7:00	540	"					50							— 176.3
	7:20	560	"		50										— 178.3
	7:40	580	"								63				— 179.7
	8:00	600	"	110.7	114.5		114			110.7		112.5	112.5	76.2	Temp
				✓			✓	✓	✓	✓	✓				

Calls 478, 479, 480 were removed from this test and connected up on starting board for overchange tests. See results in individual record book 7/12/39.

DATE	TIME	MIN	AMPS	492	551	552	568	569	404	488	TEMP	
7/1/79				" /12	(52)	(72)	/188	/134				
	4:55	0	20	1105	112.2		112		125	122.2	74	Temp.
	5:55	60	"	106.2	101.5		107.7		119.5	117.5	77	"
	6:55	120	"	103	109.7		105		123.5	114	77	"
	7:55	180	"	987/1017			1027		1072	112	117	"
	8:55	240	"	98	1004		1012		1062	109	78	"
	9:55	300	"	977	100.		101		1004/1027		787	"
	10:55	360	"	995	101.		102.		107	1077	80	"
	11:55	420	"	1007/1027			104		1072/1088		14	"
	12:55	480	"	1072	1072	1072	1032	1037	1077	1062		P.D.
7/8/79	TEST			Discharge								
	12:00	0	40	1.42	1.42	1.415	1.407	1.40	1.37	1.387		
	.04	4	"	1335	1332	1335	1327	1327	1332	1.33		
	.10	10	"	1305	1307	1305	1307	1307	1.31	1.31		
	.20	20	"	1.28	1.282	1.28	1.282	128	1.28	1.28		
	.42	42	"	124	1247	1247	1242	1247	1247	1237		
	1.00	60	"	122	1220	1222	1225	1227	121	121		
	1.00	60	"	105.6	108.5		128.		111.	112.5	82.	Temp.
	.20	80	"	121	121	1212	1212	1207	1194	119		
	.42	102	"	120	120	1197	120	120	118	117		
	2.00	120	"	1182	1185	118	1185	1185	1167	116		
	2.00	121	"	1125	109		111		114	116		
	.20	141	"	1162	117	116	117	117	1144	1147		
	5.0	161	"	1134	1135	1142	1135	1135	113	1117		



DATE	TIME	MTS	482	1002	1002	468	469	470	488	%
	PM.									
7/8/07	3.00	180	4	1116	1125	112	1135	1105	110	109	
	3.0	180	"	111	114		1145		1115	118	
	.20	200	"	1122	111	1085	1105	111	105	1057	
	30	210	"	1041	1085	1025	1082	169	1017 100	102	
	35	215	"							100	
	36½	216½	"								
	40	220	"	107	1085	1125	1061	107	93	985	
	43½	2235	"	100							
	50	230	"	98	105	100	102 100	105	92	95	
	57	234	"								
	600	240	"	826	1005	86	90	100	80	88	
	4 00	240	"	115	111 100		121		123	123	
	00	240½	"								
	46	2465	"			50	56				
	10	250	"	125	90			84	50	66 56	
	12½	2525	"								
	13½	2535	"	50				50			
	16	256	"								
	17½	2585	"		50						
					✓	✓	✓	✓			

Temp

— 143.3
— 144.3

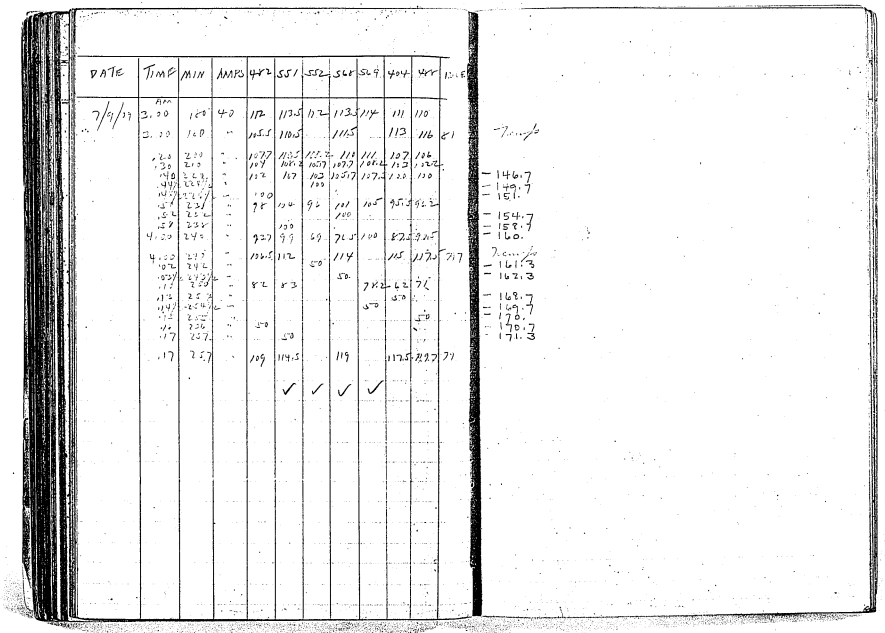
— 148.7
— 153.3
— 156.
— 160.

Temp

— 160.3
— 164.3

— 166.2
— 168.3
— 168.7
— 170.7
— 173.

DATE	TIME	MIN	AMPS	662	551	552	553	554	409	484	Dell
7/8/09	PM	Charge #		103	(13)	(13)			129	139	
	455	0		118.5	120		121		126	126	A.C.
	555	60		115	116.5		118.5		123	124	872
	655	120		111	113.5		114		117	121	88
	755	180		108	111		112.5		112	119	98
	855	240		106	109		111		113	116	98
	955	300		103	107		109		111	114	97
	1055	360		102	106		108		109	112.5	96
	1155	420		101.5	105.5		107		109	111.5	97.5
	1155	420		176	174	172	173	173.5	177.5	175	G.D.
				Discharge							
7/9	12:00	0	40	143	143.5	142.5	141	141	145.5	139.7	
	:04	4	"	133	133	132.5	132.5	132.5	133.5	133	
	:10	10	"	131	131	130.5	131	131	131.5	128.5	
	:20	20	"	128	128	127.5	128	128	128.5	128	
	:30	30	"	125.5	125.5	125	125.5	125.5	125	125	
	1:00	60	"	122.5	122.5	122.5	123	122.5	122.5	122.5	
	1:00	60	"	114	114.5		114.5		111	114	7.3
	:20	80	"	121	121	121.5	121.5	121	119.5	119.5	
	:40	100	"	122.5	124	119.5	120.5	120.5	118.5	117.5	
	2:00	120	"	118.5	118.5	118	118.5	118.5	117.5	117	
	2:00	120	"	115	110		111.5		112.5	111	8.2
	:20	140	"	117	117	116	117.5	117.5	117	115	
	:40	160	"	115	115.5	114	115.5	116	113	112.5	



DATE	TIME	MIN	MMS	442	551	552	546	549	404	441	12.6
7/9/19	AM 3.00	160	40	112	113.5	112	113.5	114	111	110	
	3.20	160	"	105.5	110.5		111.5		113	116	61
	.20	2.20	"	107.7	113.5	111.7	111	111	107	106	
	.30	2.10	"	104	106.2	103.9	107.2	108.4	112	112.2	
	.40	2.00	"	102	107	102	105.7	107.4	120	110	
	.47	1.53	"			100					
	.52	1.48	"	100							
	.56	2.44	"	98	104	92	101	105	95.5	92.2	
	.59	2.41	"			100					
	4.02	2.38	"	100							
	4.20	2.45	"	92.7	99	89	96.5	100	87.2	89.5	
	4.28	2.37	"								
	.36	2.36	"	106.5	112	80	114		105	113.5	71
	.42	2.42	"					80			
	.47	2.53	"	82	83				78.2	72	
	.53	2.53	"						80		
	.54	2.54	"					80		80	
	.55	2.55	"								
	.56	2.56	"								
	.57	2.57	"		80						
	.17	2.57	"	109	114.5		119		112.5	112.5	71
					✓	✓	✓	✓			

- 146.7
- 149.7
- 151.

- 154.7
- 158.7
- 160.

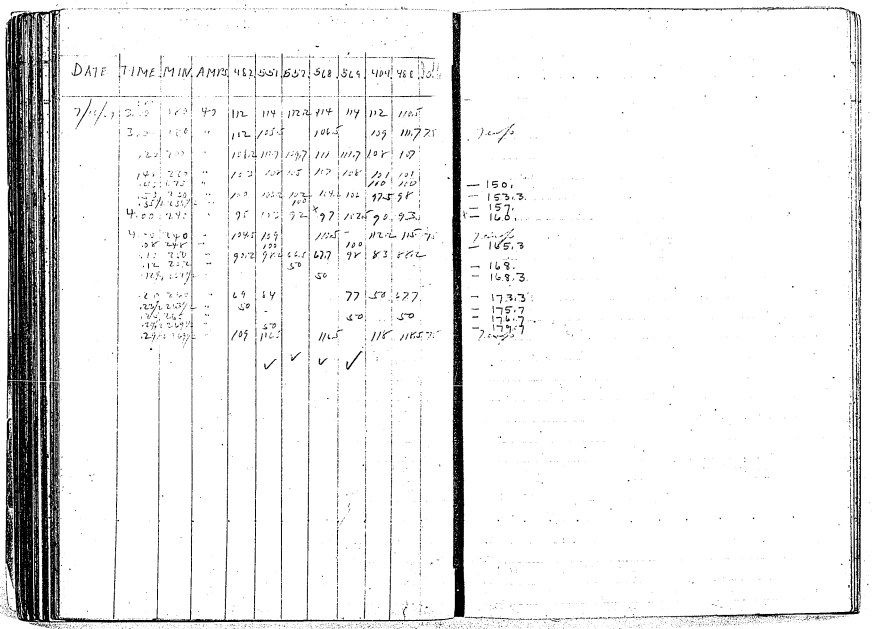
- 161.3
- 162.3

- 168.7
- 169.7
- 170.
- 170.7
- 171.3

DATE	TIME	MIN	AMP	#1	#2	#3	#4	#5	#6	#7	#8	TEMP
7/8/09	A.M.	Change		#1	(#2)	(#3)	(#4)	(#5)	#6	#7	#8	
	4:25	0	30	1167	1172		1175		1147	1152	775	Temp.
	5:25	60	"	101	1045		106		1112	113	75	"
	6:25	120	"	99.5	102		103		1052	1112	775	"
	7:25	150	"	96	100		1047		1056	108	775	"
	8:25	240	"	94	98		1002		103	106	771	"
	9:25	300	"	94	97.2		99.		102.	1045	775	"
	10:25	360	"	94	98		100		102.	1045	771	"
	11:25	420	"	96.5	98		101		1044	103.2	788	"
	11:55	450	"	178	196	1737	1345	1177	1192	1172		T.D.
7/9/09	A.M.		Discharge									
	12:00	0	40	1143	1432	1422	1422	1417	142	1412		
	.05	4	"	1133	1332	133	133	133	1332	1332		
	.10	10	"	1302	131	1302	1302	1304	131	131		
	.20	20	"	1282	1282	1282	1284	1282	1282	1284		
	.40	40	"	1260	1262	1264	1264	1264	1264	1264		
	1.00	60	"	1236	123	1217	1236	1225	1217	1215		
	1.00	60	"	1815	1896		101		108	110	797	Temp
	.20	80	"	121	1212	121	1212	121	1197	1172		
	.40	100	"	1197	1200	1195	1200	1200	1195	1177		
	2.00	120	"	1195	1187	118	1187	1197	117	1116		
	2.00	120	"	104	108		1082		1.10	113.	81.	Temp
	.20	140	"	1.115	1.17	1.16	1.175	1.175	1.155	1.14		
	.40	160	"	1.142	1.155	1.14	1.155	1.155	1.135	1.12		

DATE	TIME	MIN	AMP	552	551	552	553	554	555	556	557	558	
1/3/09	PM 300	180	90	1115	1135	1117	1135	1132	1135	1104	1109		
	300	180	"	1065	111		1115		1135	111	112	8½	Tamp
	150	200	"	167	1105	102	110	1102	104	105			
	30	210	"	154	159	104	108	105	1035	1072			
	30	216	"						100				— 144.
	34½	216	"							100			— 144.3
	90	220	"	1012	107			107	98	89			
	90½	220½	"	102									— 148.3
	45	225	"			100							— 150.
	50	230	"	977	1085	957	110	114	935	955			— 153.3
	56½	238½			100			100					— 159.
	400	240	"	922	993	99	70	955	55	90			
	402	240	"	109	114		116		107	113	112		Tamp
	02	242	"			50	50						— 161.3
	10	250	"	78	87			81	62	267			
	12	252	"						50				— 168.
	32	252½	"	50									— 169.
	42	254½	"						50				— 169.7
	15	255	"							80			— 170.
	18	256	"		50								— 172.
					✓	✓	✓	✓					

DATE	TIME	MIN.	AMP	482	551	552	566	569	404	488	Dis
7/7/09		Charge		165	(75)		(75)		191	141	
	PM. 4:55	0	30	111	115		111		120	121	Temp
	5:55	60	"	1087	1089		109		1165	1165	80 "
	6:55	120	"	101	104		1045		110	112	78 "
	7:55	180	"	915	101		102		107	109	77 "
	8:55	240	"	95	99		100		104	107	77 "
	9:55	300	"	94	98		99		103	105	75 "
	10:55	360	"	946	98		99		103	105	"
	11:55	420	"	95	985		99.2		1032	105	75 "
	11:55		"	174	177	174.2	176.5	177	183	1755	P. 40
					Discharge						
7/10	AM 12.00	0	40	144	141	143	142	142	141	140	
	.04	4	"	133	133.7	133	133	133	134	134	
	.10	10	"	131	131.7	131	131.5	131	131.7	131.7	
	.20	20	"	121	126.2	126	126	126	126	126	
	.40	40	"	125	125.7	125	125.7	125.5	125.5	125	
	1.00	60	"	123	123.5	123	123.5	123	123.2	123	
	1.00	60	"	995	1047		103		1057	1052	75 Temp
	1.20	80	"	121.5	121.7	121.7	122	121.7	121.8	120	
	1.40	100	"	120.7	120.8	120	121	120.5	119	118.2	
	2.00	120	"	119	119	118.5	119.5	119	117.7	116.5	
	2.00	120	"	100	103.5				107	110	Temp
	1.20	140	"	117	117.5	116	116	116	116	115	
	1.40	160	"	115.5	116	115	116.2	116.2	114.5	113.5	



DATE	TIME	MIN. AMPS	463	551	607	568	564	404	488	
7/11/11	3:00	4.3	112	114	112.2	114	114	112	112.5	
	3:30	"	112	112.5		106.5		109	110.775	Temps
	4:00	"	112	112.7	113.7	111	111.7	104	107	
	4:30	"	112	112	112.5	113	112.5	111	111	
	5:00	"	113	113.5	113	114.5	113	110	110	— 150.
	5:30	"	113	113.5	113.5	114.5	113	97.5	98	— 153.3
	6:00	"	95	112	112	97	112.5	98.5	98.5	— 157.
	6:30	"	112	114.5	114.5	114.5	114.5	112.5	112.5	— 160.
	7:00	"	112	114.5	114.5	114.5	114.5	112.5	112.5	Temps — 165.3
	7:30	"	95	112	112	97	112.5	98.5	98.5	
	8:00	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	8:30	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	9:00	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	9:30	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	10:00	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	10:30	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	11:00	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	11:30	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	12:00	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	12:30	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	1:00	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	1:30	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	2:00	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	2:30	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	3:00	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	3:30	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	4:00	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	4:30	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	5:00	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	5:30	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	6:00	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	6:30	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	7:00	"	112	114.5	114.5	114.5	114.5	112.5	112.5	
	7:30	"	112	114.5	114.5	114.5	114.5	112.5	112

DATE	TIME	MIN	AMPS	482	551	567	562	569	404	481	
		Lehaigh		111	(76)	(72)	112		142		
7/10/09	AM 4 55	6	30	104	110	1135			119	120	71
	5 55	6	"	"	1055	107			117	7	
	6 55	7 30	"	"	112	104			113	7	
	7 55	8 30	"	94	1022	1035			104	107	74
	8 55	9 40	"	92	96	96			101	103	73
	9 55	10 00	"	94	97.2	94.7			98.4	102	74
	10 55	11 40	"	91.2	94.7	94			99.2	101.2	74
	11 55	12 26	"	113	1135	1192	127	127	130	1182	
	11 55	12 30	"	92	96	101			100	102	75
	Stood idle 36 hours over Saturday & Sunday charged.										
		Discharge									
7/12/09	AM 12.00	0	40	133	127	124	124	1277	124	127	
	12.00	0	"	84	84		87		87	87	83
	04	4	"	124.2	1237	123	123	1234	1233	1234	
	.10	10	"	123	1222	122	1222	1225	122	121	
	.20	20	"	121.7	1206	120	121	12045	120	119.7	
	40	40	"	120	119.7	119	119.7	119.7	118	1187	
	1.00	60	"	119	1185	118	1185	1182	117	116	
	1.00	60	"	92.2	92.7		92		92.7	93	82
	.20	80	"	118	1177	117	118	118	116	1175	
	.40	100	"	117	1162	1157	117	117	115	1135	

Temp

"

"

"

"

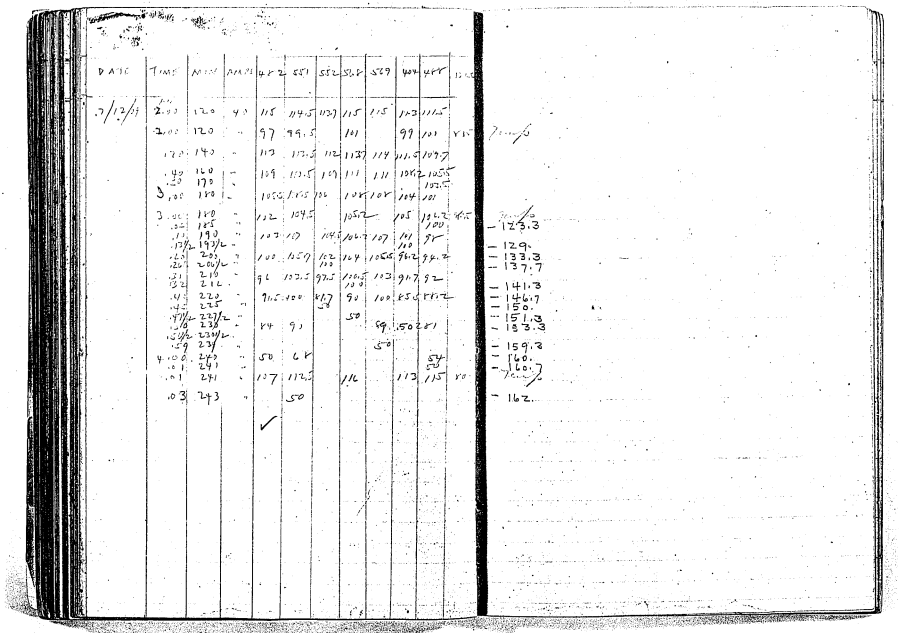
"

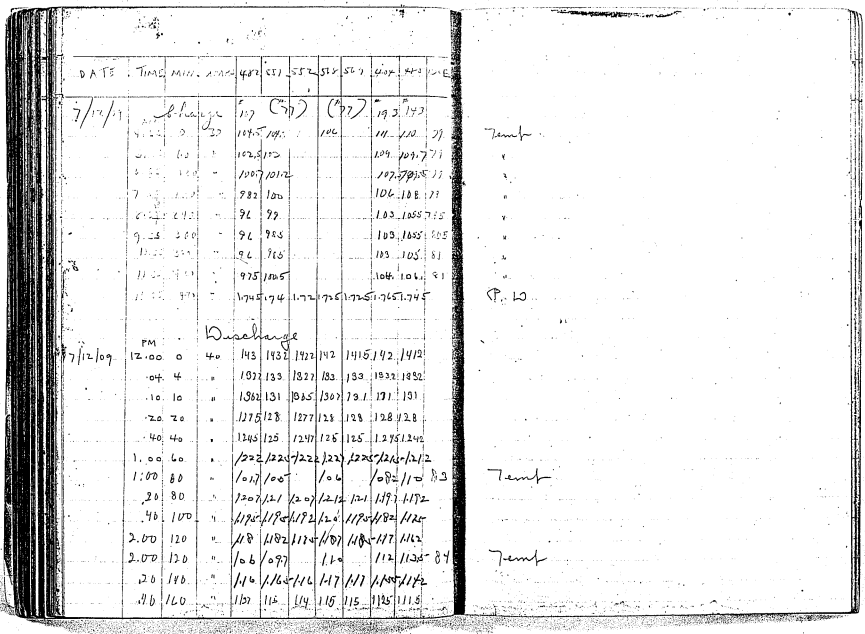
"

P. W

Temp

Temp

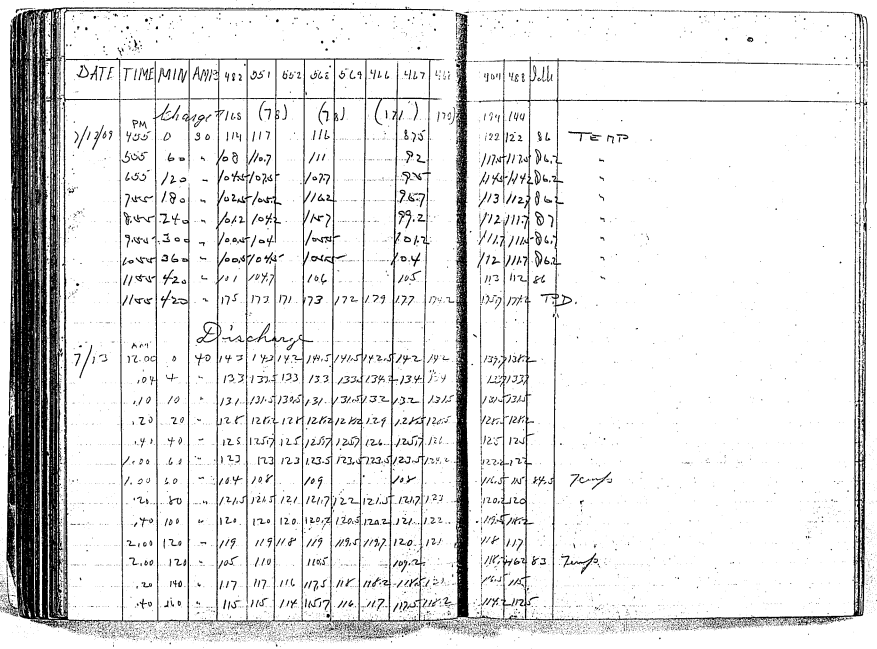




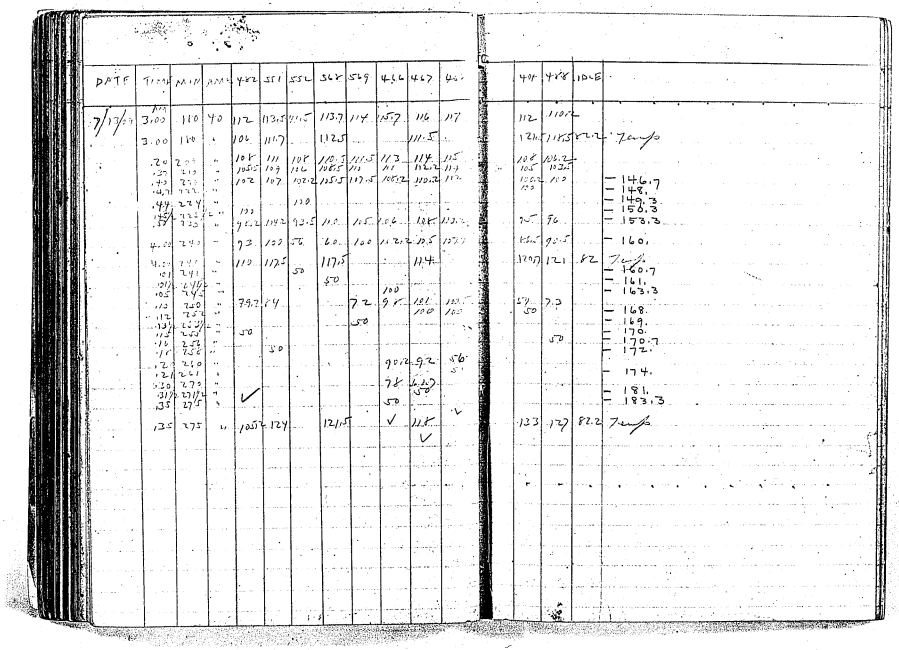
DATE	TIME	MIN.	MAX.	(4)	(3)	(2)	(1)	(5)	(6)	(7)	(8)	NOTE
7/17/11		Discharge		1.17	(CFS)			(CFS)		19.3	(CFS)	
		0	20	104.5	104.5			100		111	110	Temp
		10	1	102.5	102					109	109.7	"
		20	"	100.7	101.2					107.5	108.5	"
		30	"	98.2	100					106	108	"
		40	"	96	99					103	105.5	"
		50	"	96	98.5					103	105.5	"
		60	"	96	96.5					103	105	"
		70	"	97.5	100.5					104	106	"
		77	"	1.745	1.74	1.72	1.725	1.725	1.765	1.745		CP. D
				Discharge								
7/12/09	PM 12:00	0	40	143	1432	1422	142	1415	142	142		
	:04	4	"	1322	133	1327	133	133	1333	1332		
	:10	10	"	1362	131	1385	1307	131	131	131		
	:20	20	"	1275	128	1277	128	128	128	128		
	:40	40	"	1245	125	1247	126	125	1255	1245		
	1:00	60	"	1222	1224	1222	122	1225	1245	1212		
	1:00	60	"	1017	100		106		082	110	83	Temp
	:20	80	"	1207	121	1207	1212	121	1197	1172		
	:40	100	"	1192	1182	1182	1206	1195	1182	1125		
	2:00	120	"	118	1182	1174	1187	1185	117	1162		
	2:00	120	"	106	097		110		112	1135	87	Temp
	:20	140	"	114	1164	116	117	117	1145	1142		
	:40	160	"	1151	115	114	115	115	1125	1115		

DATE	TIME	MIN	AMPS	482	551	552	548	549	464	488	TEMP	
	P.M.											
7/12/09	3.00	/80	40	110	113	111	113	113	110	109		
	3.00	/80	"	101	114				119	117	85	Temp.
	2	200	"	105	110	107	1085	1085	1035 100	1025		— 139.
	28	208	"							100		— 134.3
	29	209	"									
	36	216	"	1017	133	101	107	1072	91	957		
	36½	216½	"	100								— 142.3
	37	217	"			100						— 144.7
	46	226	"	98	1050	92	1025 100	105	941	96		— 148.7
	48	228	"	92	100	84	68	100	85	91		— 153.3
	52½	232½	"			50						— 155.
	53	233	"				50					— 155.3
	400	2110	"	76	96	"		81	76	80		
	401	2110	"	114	113				120 50	122	86	Temp.
	01	2141	"	50						"		— 160.7
	22	2142	"					50				— 161.3
	22½	2142½	"							50		— 161.7
	43	2145	"									— 163.8
	09	2149	"		50							— 165.8
			"									
			"	V								

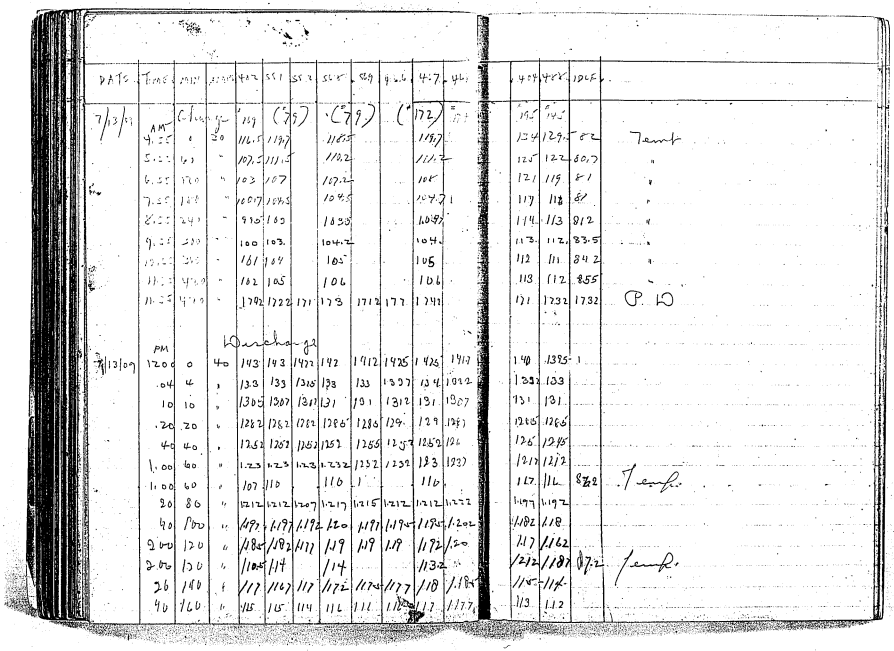
Cells 466, 467, 468 were connected in Endurance Section after this discharge for 50 runs.



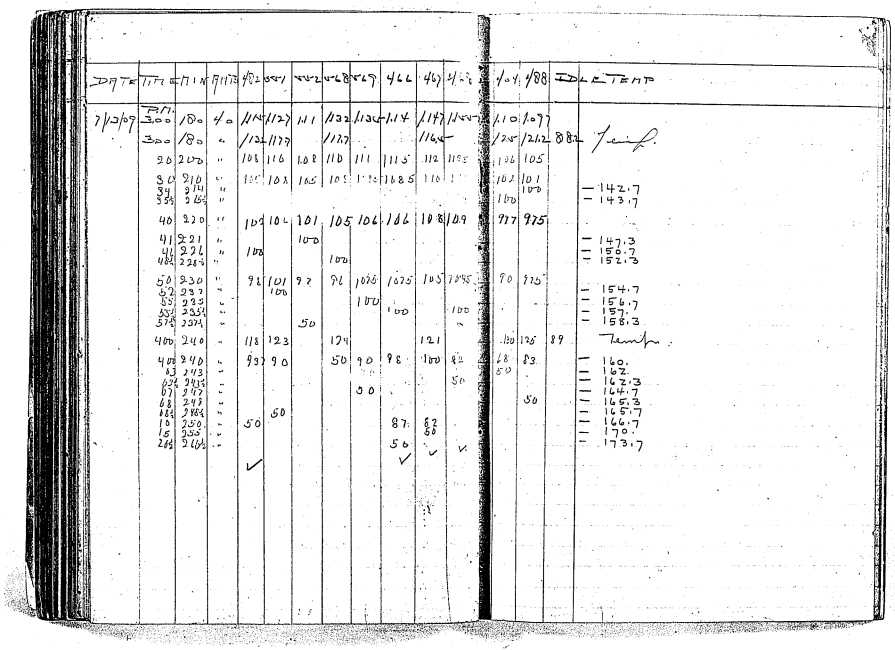
DATE	TIME	MIN	AMB	482	051	652	526	579	446	427	451	401	488	Delt	
		Charge		116.5	(78)		(78)			(171)	170	174	144		
7/13/09	PM 455	0	30	114	117		116			85.5		122	122	96	TEMP
	505	60	"	108	110.7		111			92		117.5	117.0	96.2	"
	655	120	"	107.5	107.5		107.7			93.5		114.5	114.2	96.2	"
	755	180	"	102.5	103.2		106.2			96.7		113	112.3	96.2	"
	855	240	"	102	102		105.7			99.2		112	111.7	97	"
	955	300	"	100.5	101		101.5			101.2		111.7	111.5	96.7	"
	1055	360	"	100.5	100.5		101.2			104		112	111.7	96.2	"
	1155	420	"	101	104.7		106			105		113	112	98	"
	1255	480	"	115	113	111	113	112	109	107	107.2	113.7	113.4	TBD.	
				Discharge											
7/13	AM 12:00	0	40	143	142	142	141.5	141.5	142.5	142	141.5	133.7	133.2		
	.04	4	"	133	133.5	133	133	133.5	134	134	134	127	127.5		
	.10	10	"	131	131.5	130.5	131	131.5	132	132	132	125	125.5		
	.20	20	"	125	126.2	126	126.2	126.2	126	126.5	126.5	120.5	120.2		
	.41	40	"	125	125.5	125	125.5	125.5	126	125.5	126	120	120		
	1.00	60	"	123	123	123	123.5	123.5	123.5	123.5	123.5	118.2	118		
	1.00	60	"	104	104		109			104		116.5	116	88.5	Temp
	.20	80	"	121.5	121.5	121	121.7	122	122	121.5	121.7	123	120.2	120	"
	.40	100	"	120	120	120.0	120.2	120.5	120.2	120	120	119.5	118.2		
	2.00	120	"	119	119	118	119	119.5	119.7	120	121	118	117		
	2.00	121	"	105	110		110.5			109.2		118	116.4	83	Temp
	.20	140	"	117	117	116	117.5	118	118.2	118.5	118.5	118.5	118		
	.40	160	"	115	115	114	115.7	116	117	117.5	117.2	117.2	116.5		

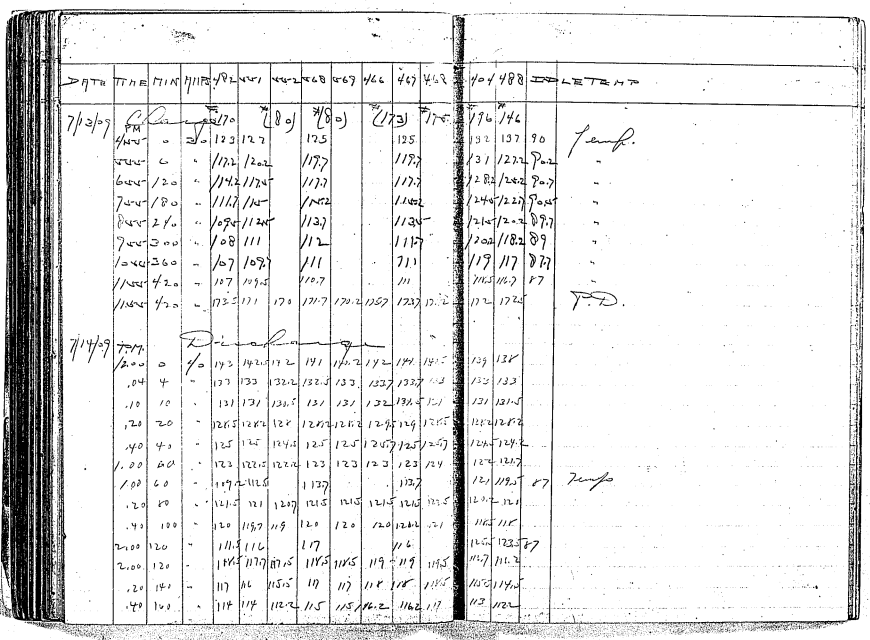


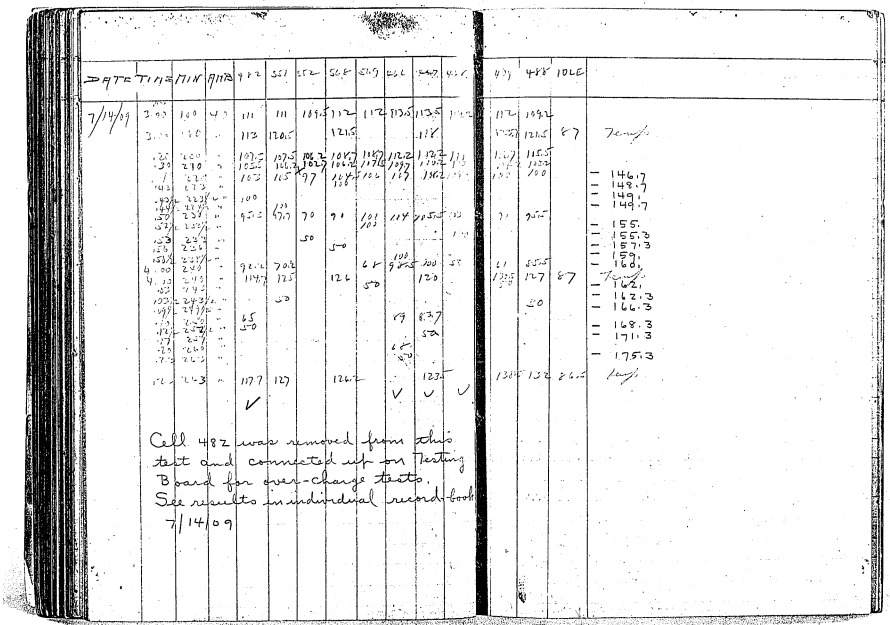
DATE	TIME	MM	HH	482	511	556	562	569	456	467	604	491	498	1046	
7/13/84	AM 3.00	180	40	112	113.5	111.5	113.7	114	105.7	116	117	112	110.2		
	3.00	180	"	106	111.7		112.5			111.5		120.1	118.5	82.2	Temps
	.20	2.00	"	104	111	108	110.5	111.5	113	114	115	108	116.2		
	.25	2.15	"	105.5	109	116	108.5	111	111	116.2	119	105	113.1		
	.43	2.33	"	102	107	102.2	105.5	113.5	108.2	110.2	112	103	110		— 146.7
	.47	2.37	"									103			— 148.
	.49	2.39	"			110									— 149.3
	.54	2.44	"	103											— 150.3
	.59	2.49	"	97.2	114.2	93.5	111.	115.	106	108	113.2	95	96		— 158.3
	4.00	2.50	"	93	103	96	60.	100	102.2	105	107.2	102	95.5		— 160.
	4.21	3.11	"	110	117.5	50	117.5			114		120.7	121	82	Temps
	.01	3.11	"			50	50								— 160.7
	.09	3.19	"						100						— 161.
	.05	3.15	"						100						— 163.3
	.12	3.22	"	79.2	89			72	97	101	103	57	73		— 168.
	.17	3.27	"					50		100	105	50			— 169.
	.13	3.23	"			50									— 170.
	.15	3.25	"										50		— 170.7
	.19	3.29	"			50									— 172.
	.22	3.32	"						90.2	92	96				
	.26	3.36	"												— 174.
	.30	3.40	"						74	100					— 181.
	.31	3.41	"	✓					50						— 183.3
	.33	3.43	"												
	.35	3.45	"	105.2	124		121.5		✓	114		123	127	82.2	Temps
										✓					



DATE	TIME			42	51	58	51.5	69	92.6	47.7	96	49	48.2	104	
7/13/09	AM			119	(79)		(79)			(72)		135	142		
	9:25	0	20	112.5	119.7		116.5			118.7		124	129.5	82	Temp
	5:25	60	"	107.5	111.5		110.2			111.7		125	122	80.5	"
	6:25	120	"	103	107		107.2			108		121	119	81	"
	7:25	180	"	100.5	104.5		104.5			104.7		117	118	81	"
	8:25	240	"	98.5	103		103.5			104.5		114	113	81.2	"
	9:25	300	"	100	103		104.2			104.4		113	112	83.5	"
	10:25	360	"	101	104		105			105		112	111	84.2	"
	11:25	420	"	102	105		106			106		113	112	855	"
	12:25	480	"	1702	1722	1711	173	1712	1722	1741		121	1232	1732	P. 5
						Discharge									
7/13/09	PM														
	12:00	0	40	143	143	1422	142	1412	1425	1426	1417	140	1385	1	
	.04	4	"	133	133	1316	138	133	1327	134	1322	1332	133		
	10	10	"	1305	1307	1311	131	131	1312	131	1307	131	131		
	.20	20	"	1282	1282	1282	1286	1286	129	129	1287	1265	1266		
	40	40	"	1262	1262	1262	1262	1266	1257	1262	126	126	1245		
	1.00	60	"	1223	1223	1223	1232	1232	1232	123	1233	1212	1212		
	1.00	60	"	107	110		110			110		117	116	872	Temp.
	20	80	"	1212	1212	1207	1217	1215	1212	1212	1222	1197	1192		
	40	100	"	1192	1197	1192	120	1197	1197	1194	1202	1182	118		
	60	120	"	1184	1182	1177	119	119	119	1192	120	117	1162		
	2.00	130	"	1105	114		114			1132		1212	1182	872	Temp.
	20	140	"	117	1167	117	1172	1174	1177	118	1184	115	114		
	40	160	"	115	115	114	114	111	1122	117	1177	113	112		



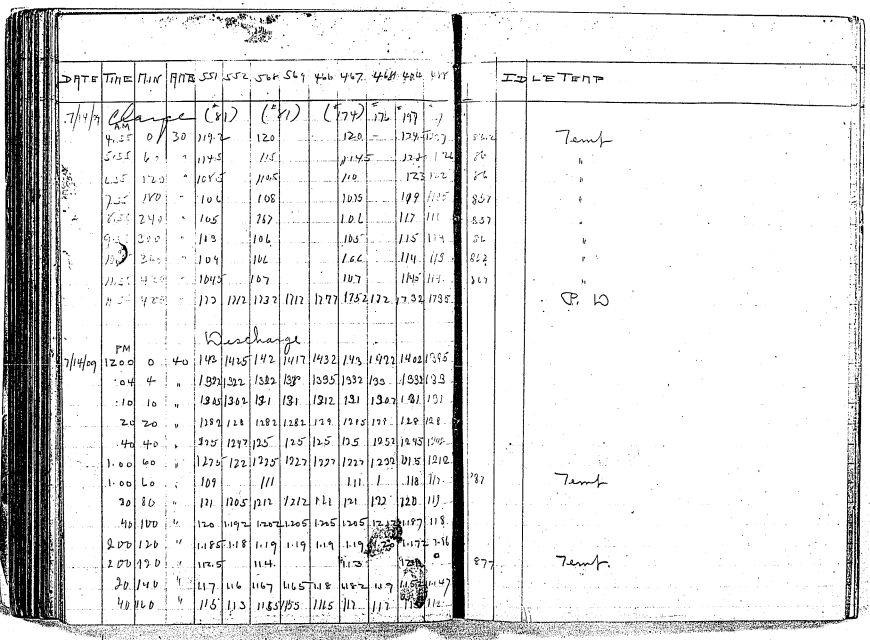




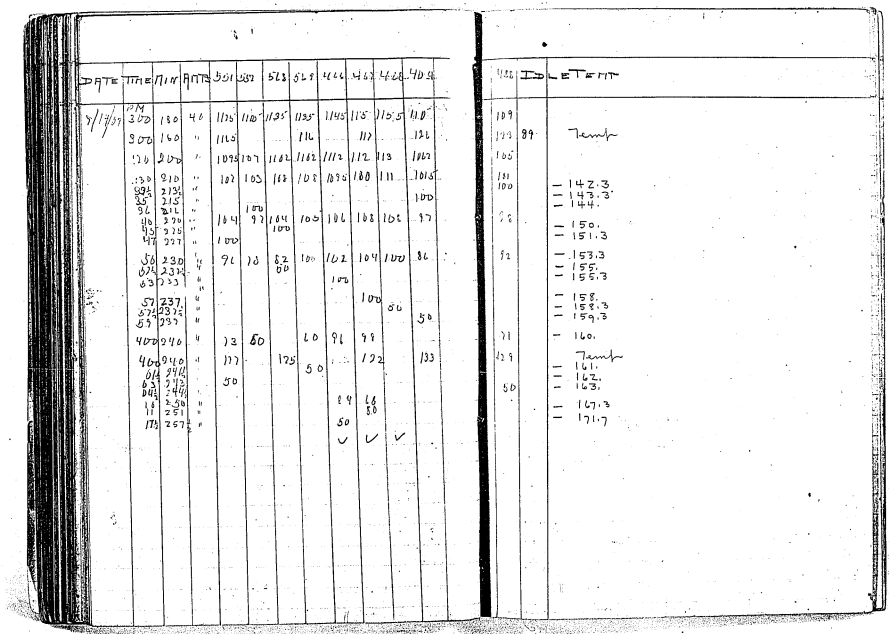
DATE	TIME	MIN	AIR	482	551	552	506	509	556	540	553	433	488	10LE	
7/14/09	3:00	160	43	111	111	109.5	112	112	113.5	113.5	112	112	109.2		
	3:[illegible]	160	"	113	120.5		121.5			118		120.5	120.5	87	Temp
	3:20	210	"	107.5	107.5	106.7	104.7	110.7	112.2	112.7	111	111.7	115.5		
	3:30	210	"	105.5	116.2	102.7	106.2	117.6	109.7	109.7		112.2	100		
	3:40	210	"	103	115	97	108	122	117	116.2	113	100			— 146.7
	3:50	210	"	100											— 148.7
	4:00	210	"												— 149.
	4:10	210	"												— 149.7
	4:20	210	"												
	4:30	210	"	97.5	120	70	91	101	114	115.5	112	91	95.5		— 155.
	4:40	210	"			50		103							— 155.3
	4:50	210	"				50				111				— 157.3
	5:00	210	"						100	100					— 159.
	5:10	210	"	92.5	70		64	95.5		100	98	81	85.5		— 160.
4:00	5:20	210	"	114	125		126			120		125	127	87	Temp
4:10	5:30	210	"			50		50							— 162.
	5:40	210	"										120		— 162.3
	5:50	210	"												— 166.3
	6:00	210	"	65	50				69	87.7					
	6:10	210	"							52					— 168.3
	6:20	210	"												— 171.3
	6:30	210	"						64						
	6:40	210	"						50						— 175.3
	6:50	210	"												
	7:00	210	"	117.7	127		126.2		V	123.7		124.5	123	84.5	Temp
				✓						∪	✓				

Cell 482 was removed from this test and connected up on Testing Board for over-charge tests. See results in individual record book.

7/14/09

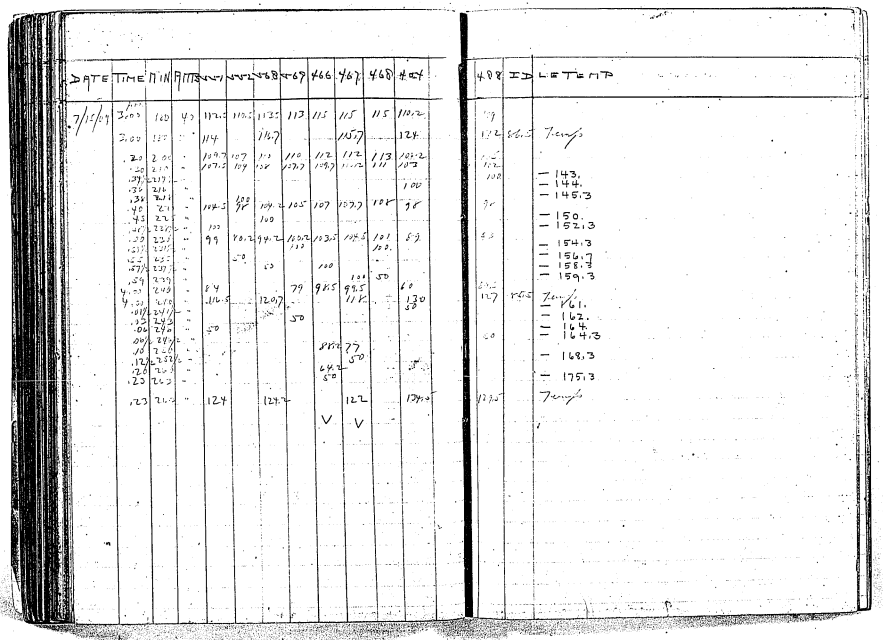


DATE	TIME	MIN	AMT	551	552	564	569	466	467	468	426	617		DELETE
7/14/09	Change			(551)		(551)		(574)	572	597				
	AM 4:25	0	30	1197		120			1200	1194	1207		5842	Temp
	5:55	60	"	1145		115			1145	1134	1142		82	"
	6:55	120	"	1085		1105			110	1123	1102		78	"
	7:55	180	"	106		108			1035	109	1035		857	"
	8:55	240	"	105		767			101	117	111		837	"
	9:55	300	"	113		106			105	115	114		86	"
	10:55	360	"	109		102			1062	114	115		812	"
	11:55	420	"	1045		107			107	1145	114		767	"
	"	480	"	1122	1112	1132	1112	1127	1152	1122	1132	1136		C.O.
						Discharge								
7/14/09	PM 12:00	0	40	148	1425	142	1417	1432	143	1422	1402	1395		
	:04	4	"	1392	1332	1382	138	1395	1332	133	1332	133		
	:10	10	"	1345	1362	131	131	1312	131	1307	131	1301		
	20	20	"	1282	128	1282	1282	129	1215	127	128	128		
	:40	40	"	1235	1247	125	125	125	125	1252	1245	1245		
	1:00	60	"	1225	122	1225	1227	1227	1223	1232	1215	1212		
	1:00	60	"	109		111			111	1	118	113	787	Temp
	20	80	"	121	1205	1212	1212	121	121	122	1220	119		
	40	100	"	120	1192	1202	1205	1205	1205	1225	1197	118		
	2:00	120	"	1185	118	119	119	119	119	120	1172	116		
	20	140	"	1175		1143		1133		1281	0		877	Temp
	40	160	"	117	116	1167	1165	118	1182	117	1165	1147		
	3:00	180	"	115	113	1155	1155	1145	117	117	1145	1112		



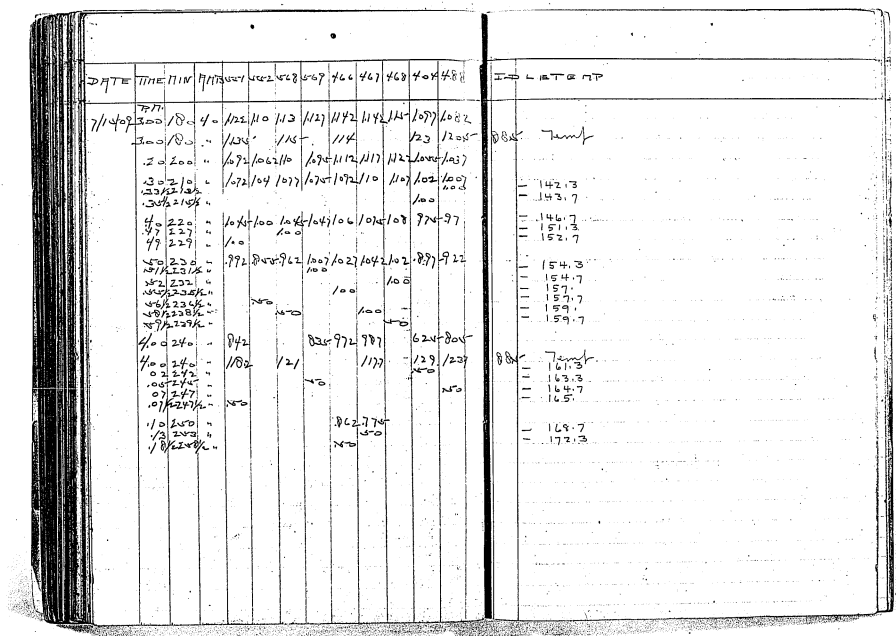
| DATE | TIME | MIN | ATTS | 551 | 587 | 623 | 659 | 695 | 731 | 767 | 803 | 839 | 875 | 911 | 947 | 983 | 1019 | 1055 | 1091 | 1127 | 1163 | 1199 | 1235 |

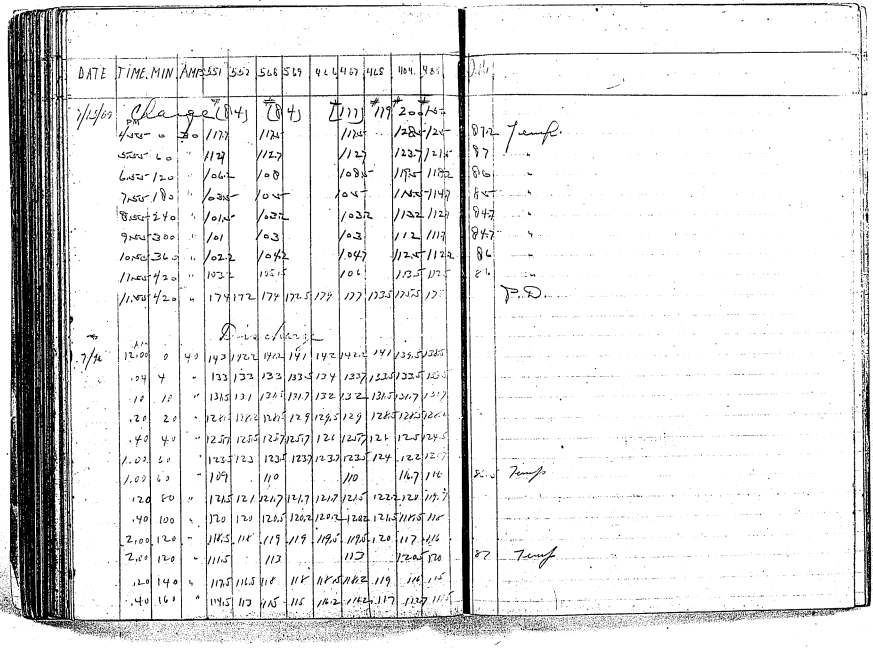
DATE	TIME	MIN	AMT	551	552	568	569	466	467	468	484	488	IDLE TIME
	Charge			(82)		(82)		(175)	177	198		148	
7/14/09	PM 4.55	0	30	112		120		121		139		139	80 Temp.
	5.55	60	"	127		147		166		128		124	88.2 "
	6.55	120	"	072		102		114		234		116	88.4 "
	7.55	180	"	042		08		08		20		107	88 "
	8.55	240	"	037		074		08		18		172	88.2 "
	9.55	300	"	036		074		077		17		116	88.2 "
	10.55	360	"	037		072		024		16		114.2	87.7 "
	11.55	420	"	134		102.3		127		155.7		114.7	87 "
	11.55	420	"	173	171	173	171.7	178	177	177.2	177.2	177.7	T.D.
						Discharge							
7/15	AM 12.00	0	40	143.7	142.5	142.5	141	142	142.2	140.5	139	139	
	.04	4	"	133	133	133	133	133	134	132.7	133.7	133	
	.10	10	"	130.5	130.5	131	131	130.7	131	130.5	131	131	
	.20	20	"	126.5	126.2	129	129.5	129.5	129	128.5	128.5	128.5	
	.40	40	"	125.5	125.5	125.7	125.7	126	125.7	126	125	125	
	1.00	60	"	123	123	123.2	123.5	123	123	124	122	122.7	
	1.00	60	"	108.5		111			110.5		111.5	112.5	Temp
	1.20	80	"	121.5	121	121.7	121.7	121.7	121.5	122.2	120	119.5	
	.40	100	"	120	119.5	120.2	120.2	120.2	120.5	121	118.2	116	
	2.00	120	"	117.2	117.2	119	119	119.7	119.5	120	117	117	
	2.00	120	"	110.7		113.5			113		112.7	113.5	88.2 Temp
	.20	140	"	117	116	117.7	117.7	118	118	117.5	115.5	117.5	
	.40	160	"	115	113.5	116	116.7	117	116.5	117	113	112	



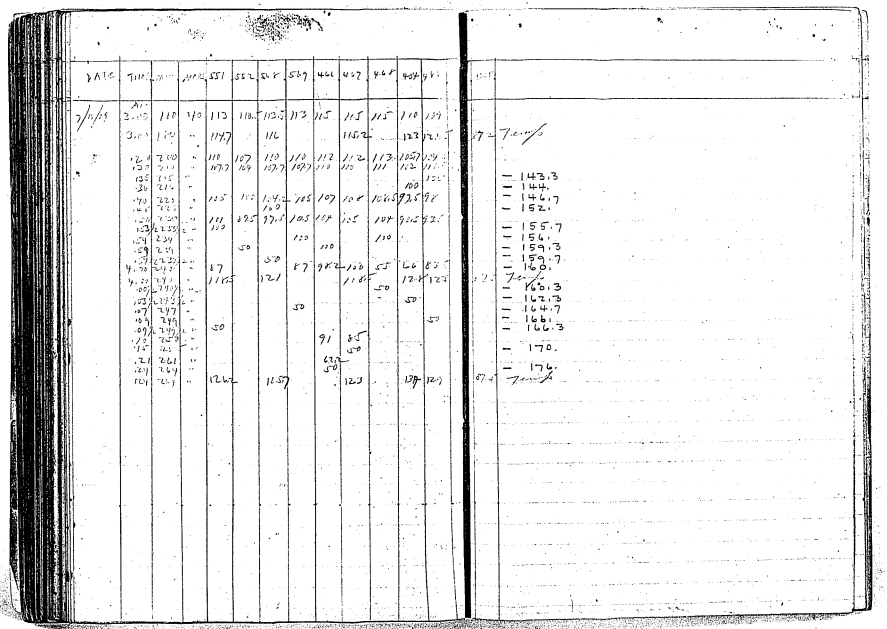
DATE	TIME	MIN	AMPS	V	468	469	466	467	468	484	488	HA	LETTER
7/15/07	3:00	160	43	112.5	113.2	113.2	113	115	115	115	110.2	119	
	2:00	120	"	114		114.7			115.7	124	122	88.5	Temps
	.20	2:00	"	109.7	107	113	110	112	112	113	103.2	112	
	.00	1:40	"	107.2	109	108	107.2	108.7	111.2	111	103	112	
	.171	1:17	"									100	— 143.
	.136	2:16	"								100		— 144.
	.138	2:18	"										— 146.3
	.140	2:20	"	104.2	98	104.2	105	107	107.7	104	96	96	
	.142	2:22	"			100							— 150.
	.147	2:27	"	100									— 152.3
	.133	2:13	"	99	98.2	99.2	100.2	103.2	104.5	101	89	93	
	.217	3:37	"				102			102.			— 154.3
	.127	2:07	"		80								— 156.7
	.167	2:47	"			63		100					— 158.7
	.154	2:34	"						100	50			— 159.3
	4:51	2:49	"	84			79	98.5	99.5		60	60	
	4:20	6:10	"	116.5		120.7			111.		130	137	Temps 161.
	.101	2:41	"								50		— 162.
	.13	2:43	"				50						— 164.
	.06	2:36	"	50									— 164.3
	.09	2:39	"					98.2	77			20	
	.10	2:40	"	"					50				— 168.3
	.178	2:378	"										
	.12.2	2:32	"					64.2					— 175.3
	.123	2:23	"					50					
	.123	2:23	"	124		124.2			122		134.2	132.5	Temps
							V	V					

DATE	TIME	MIN	AMB	8	9	10	11	12	1	2	3	4	5	6	7	8	REMARKS
7/15/09																	



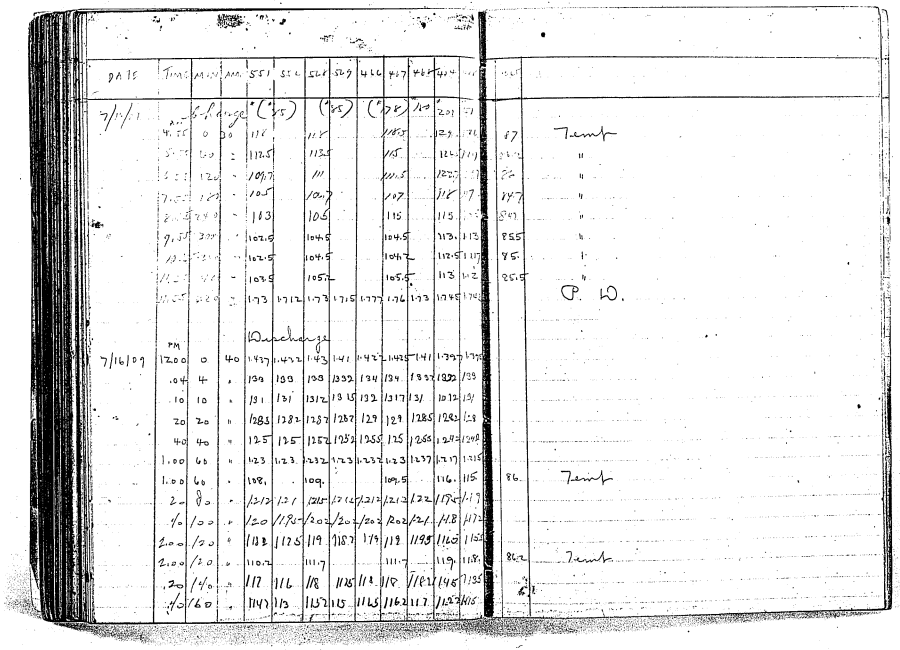


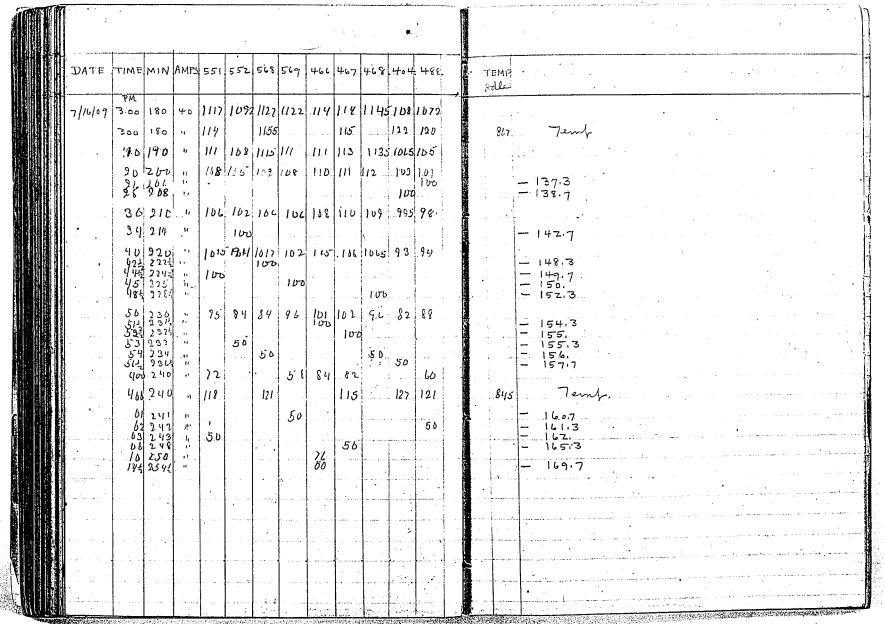
DATE	TIME. MIN	AMB	551	502	508	569	464	467	468	484	485	
7/13/03	Change (804) to (804)							(111)	119	200		
	4:55 PM 0	80	/177		/124			/124		/124	872	Temp.
	5:55 60	"	/178		/127			/127		/127	87	"
	6:55 120	"	/064		/08			/088		/084	86	"
	7:55 180	"	/038		/04			/04		/047	84	"
	8:55 240	"	/012		/022			/022		/022	842	"
	9:55 300	"	/01		/03			/03		/02	843	"
	10:55 360	"	/022		/042			/042		/022	86	"
	11:55 420	"	102		105			/06		/03	84	"
	12:55 480	"	174	172	174	172.5	172	177	172.5	172.5	17	P.D.
7/14	AM 12:00 0	40	143	142	142	141	142	142.5	141	135.5	135	
	.04 4	"	133	133	133	133.5	134	133.5	133.5	133.5	133	
	.10 10	"	131.5	131	131.5	131.7	132	132	132.5	130.7	131	
	.20 20	"	129.5	129.5	129.5	129.5	129	129.5	129.5	129.5	129.5	
	.40 40	"	125.5	125.5	125.5	125.5	125	125.5	125	125.5	125.5	
	1.00 60	"	122.5	123	123.5	123.5	123.5	123.5	124	122.5	122.5	
	1.00 60	"	109		110			110		116.7	116	5:55 Temp
	1.20 80	"	124.5	124.5	124.7	124.7	124.7	124.5	122.5	124.5	117.7	
	.40 100	"	120	120	120.5	120.2	120.2	120.5	120.5	119.5	116	
	2.00 120	"	114.5	114	114.9	114.9	114.9	114.9	114.9	117	116	
	2.00 120	"	111.5		113			113		120.5	120	7:55 Temp
	1.20 140	"	117.5	116.5	118	118	118.5	118.2	119	116	115	
	.40 160	"	114.5	113	115	115	116.2	116.2	117	123.7	117.5	



DATE	TIME													
	AM													
7/10/53	3:00	120	113	113	110	113.5	113	115	115	115	110	109		
	3:30	120	"	114?	"	116			116.5	122	122	121	67	70
	4:00	120	"	110	107	110	110	112	112	113	105?	109		
	4:30	120	"	107?	104	109.5	109?	111	110	111	112	111		
	5:00	115	"									102		
	5:30	120	"								100			
	6:00	120	"	115	111	114.5	105	107	104	106.5	97.5	98		
	6:30	120	"			109								
	7:00	120	"	111	105	107.5	105	104	105	104	104.5	102		
	7:30	120	"	110										
	8:00	120	"				110			110				
	8:30	120	"		50			110						
	9:00	120	"			50								
9:20	9:20	"	87			87	94.2	100	55	66	85			
9:25	9:30	"	116.5		121				116.5	124	124		62	70
	9:30	9:30	"							50				
	10:00	10:00	"								50			
	10:30	10:30	"					50						
	11:00	11:00	"									50		
	11:30	11:30	"	50										
	12:00	12:00	"						91	85				
	12:30	12:30	"							50				
	1:00	1:00	"											
	1:30	1:30	"						63					
	2:00	2:00	"						50					
	2:30	2:30	"	126		116				123		119	124	67

- 143.3
- 144.
- 146.7
- 152.
- 155.7
- 156.
- 159.3
- 159.7
- 160.
- 166.3
- 167.3
- 164.7
- 161.
- 166.3
- 170.
- 176.





DATE	TIME	MIN	AMPS	551	552	553	567	466	467	468	464	466
	PM											
7/16/09	3:00	180	40	1117	1092	1127	1122	114	118	1145	108	1072
	300	180	"	119		1155			115		122	120
	40	140	"	111	108	1115	111	111	113	1135	1065	1065
	9	260	"	158	156	109	108	110	111	112	103	101
	36	106	"									100
	86	908	"								100	
	36	210	"	106	102	106	102	88	110	109	955	98
	34	210	"		100							
	40	920	"	105	98	1017	102	115	116	1065	93	99
	922	2221	"			100						
	44	2205	"	100								
	45	225	"				100					
	484	2265	"							100		
	56	230	"	95	84	89	96	101	102	96	82	88
	54	2301	"					100				
	532	2321	"						100			
	53	233	"		50							
	54	234	"			50				50	50	
	544	2365	"									
	400	240	"	72			56	84	82			60
	46	240	"	118		121			115		127	121
	01	241	"				50					
	02	242	"									60
	03	243	"	50								
	04	244	"						56			
	10	250	"					76				
	194	2542	"					00				

TEMP
Soldier

867 Temp

— 127.3
— 138.7

— 142.7

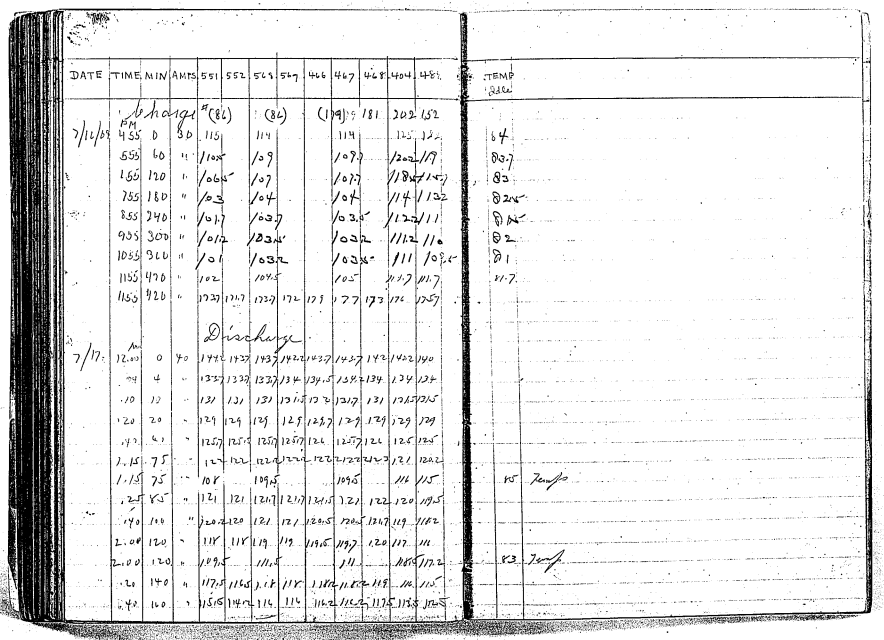
— 148.3
— 149.7
— 150.
— 152.3

— 154.3
— 155.
— 155.3
— 156.
— 157.7

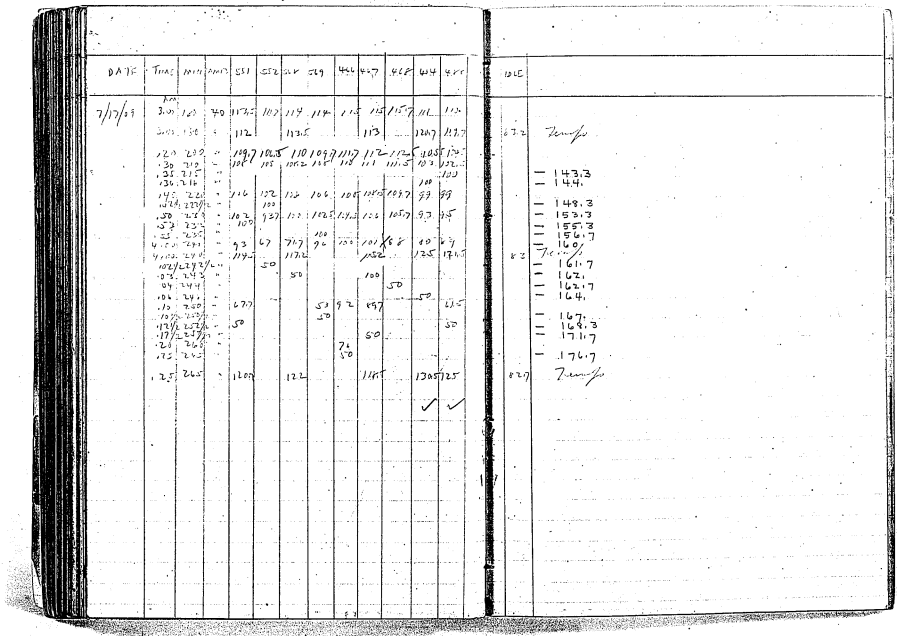
845 Temp.

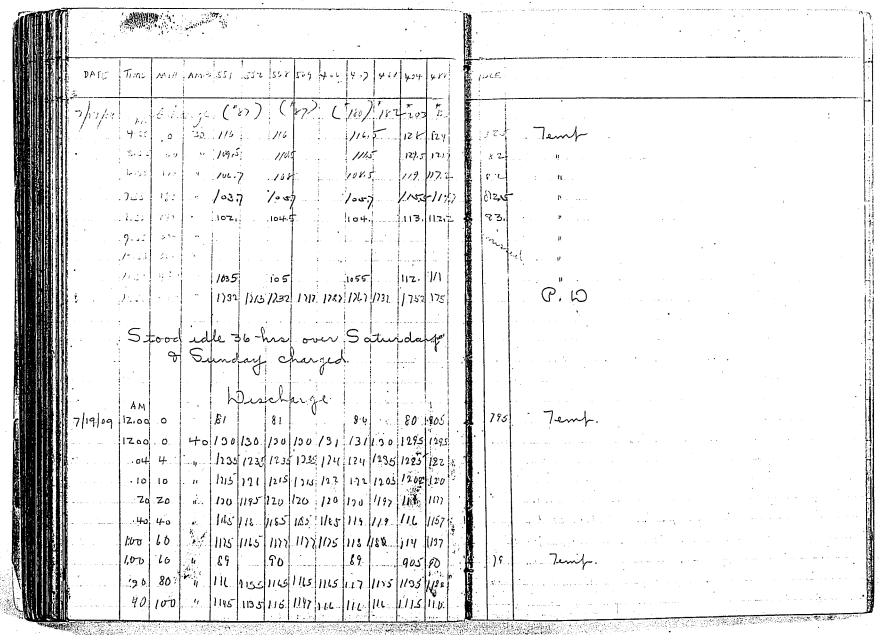
— 160.7
— 161.3
— 162.
— 165.3

— 169.7



DATE	TIME	MIN	AMS	551	552	563	547	466	467	468	404	481	TEMP
			Charge	#(82)		(82)		(109)	181		202	152	
7/12/89	PM 455	D	30	115		114			114		125	122	84
	555	60	"	/104		/09			/09		/202	/19	80.7
	655	120	"	/064		/07			/07		/184	/17	82
	755	180	"	/03		/04			/04		/14	/132	82.5
	855	240	"	/01.7		/03.7			/03.5		/122	/11	81.5
	955	300	"	/01.7		/03.5			/02.5		/112	/10	82
	1055	360	"	/01		/03.2			/02.5		/11	/09.5	81
	1155	420	"	102		104.5			105		117	111.7	81.7
	1155	420	"	123.7	121.7	123.7	122	123	122	123	122	125.7	
				Discharge									
7/13	AM 12.00	0	40	144.5	123.7	143.7	142.2	142.7	142.7	142	142.2	140	
	.04	4	"	133.7	133.7	133.7	134	134.5	133.5	134	134	134	
	.10	10	"	131	131	131	131.5	132.2	132.7	131	132.5	132.5	
	.20	20	"	129	129	129	129.5	129.7	129	129	129	129	
	.30	30	"	127.7	127.5	127.5	127.7	127	127.5	127	127.5	127.5	
	.45	45	"	127	127	127	127	127	127	127	127	127	
	1.15	75	"	107		109.5			109.5		116	115	85 Temp
	.25	85	"	121	121	121.7	121.7	121.5	121	122	120	119.5	
	.40	100	"	120.2	120	121	121	120.5	120.5	120.7	119	118.2	
	2.00	120	"	117	117	119	119	119.5	119.7	120	117	116	
	2.00	120	"	109.5		111.5			111		118.5	117.2	83 Temp
	.20	140	"	117.5	116.5	117	117	117.2	117.5	118	116	115	
	.40	160	"	115.5	114.7	116	116	116.2	116.2	117.5	115.5	115	


DATE
7/12/83
Temp
143.3
144.
148.3
153.3
155.3
156.7
160.
Temp
161.7
162.
162.7
164.
167.
168.3
171.7
176.7
Temp



| DATE | TIME | MIN | AM | | |

DATE	TIME	MIN	AMP	551	552	562	569	426	467	416	404	938	Hb		
7/19/17	AM 2.00	120	40	113	112	1135	1135	1145	115	1165	110	11			
	2.00	"	"	96		955			947		98	96	172	Temp	
	:26	140	"	111	1085	1117	1115	1125	1132	1132	1021	1057			
	26	150	"	110	108	1165	1165	1175	1125	110	106	1085			
	40	160	"	103	101	109	1065	112	112	112	1095	1045			
	41	161	"									100			
	50	170	"	1075	1045	1025	107	110	110	111	102	98			
	51	171	"								100				— 110.7
	300	180	"	102	101	1065	1045	101	1025	109	722	907			— 117.3
	3.00	180	"	100		101			975		101	104	172	Temp	
	:01	181	"		100										— 126.
	10	190	"	104	992	1022	1025	1062	107	1077	94	915			
	20	200	"	105	945	1070	100	104	105	105	98	882			— 133.3
	1.96	2.096	"	100	"										— 136.3
	30	210	"	92	50	90	96	101	102	100	78	84			— 140.
	35	215	"		50			100							— 143.3
	36	216	"			56			100						— 144.
	37	217	"							50	56				— 144.7
	40	220	"	78			70	0	97			79			
	43	223	"				50								— 148.3
	45	225	"	56								80			— 150.
	56	230	"					80	57						
	56	231	"						60						— 154.3
	57	232	"					50							— 158.
	460	240		111		1135			109		117	115	175	Temp	
											✓	✓			

Cell # 398 was connected in Endurance Section after this discharge for 25 runs.

DATE	TIME	MIN	AMB	851	552	858	567	466	467	468	469	488	398	266
				Weight F (88)		# (82)		(F 181)	192	200	184		358	
7/19/07	AM	455	0	30	106		103		106		115	110	80	112
		555	60	"	1016		1015		101		111	103	24	26
		655	120	"	97		97		97		102	105	85	74
		755	180		94		95		94		100	103	88	72
		855	240		93		94		94		102	102	90	72
		955	300		932		947		942		102	102	92	73
		1055	360		94		947		947		102	102	94	74
		1155	420		958		972		977		1062	1046	97	75
		1255	480		176	174	176	174	182	180	177	179	178	82
7/19/07														
	200	0	40	1.44	1.434	1.43	1.422	1.428	1.434	1.435	1.417	1.46	1.40	1.397
	04	4	"	1327	1327	1337	1332	1342	1334	1337	1337	1335	1336	
	10	10	"	1312	1312	1315	1315	1322	1322	1315	1317	1312	1337	
	20	20	"	1285	1282	1285	1287	1292	1289	1289	1287	1285	1302	
	40	40	"	1245	1240	1245	1242	1247	1247	1247	1247	1242	1262	
	100	60	"	1220	1226	1231	1232	123	1223	1227	1222	1216	1236	
	100	80	"	100		102			1017		1018	1006	1017	1762
	20	80	"	121	121	1215	1215	121	121	122	121	119	1245	
	40	100	"	120	1180	1206	1202	120	120	1214	1186	118	1220	
	200	120	"	118	1182	119	119	119	1192	120	117	1162	1193	
	200	120	"	1002		1000		1007		112	112		1007	1705
	20	140	"	117	116	119	1175	118	118	119	1167	1165	118	
	40	160	"	115	114	1167	1157	1162	1162	117	1153	1125	117	

Temp

"

"

"

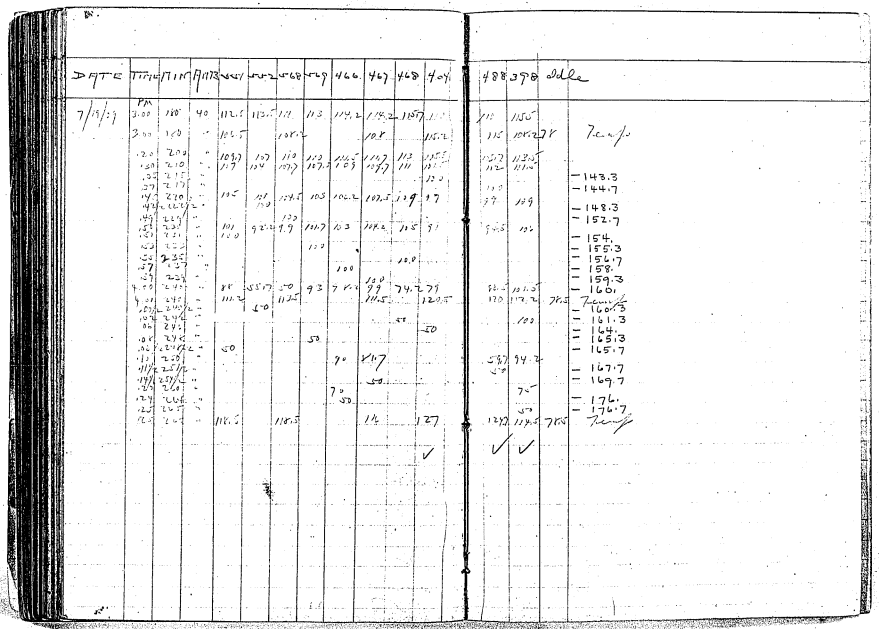
"

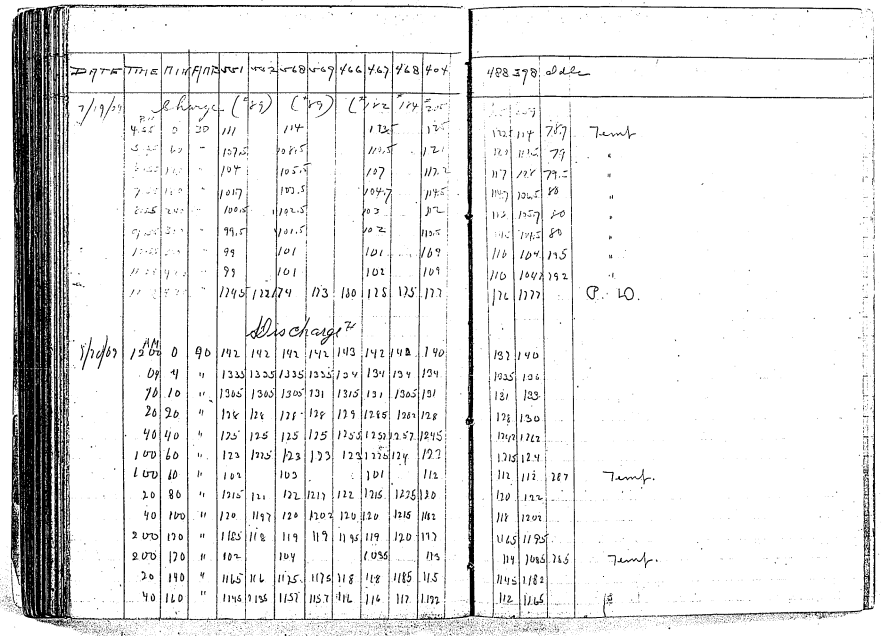
"

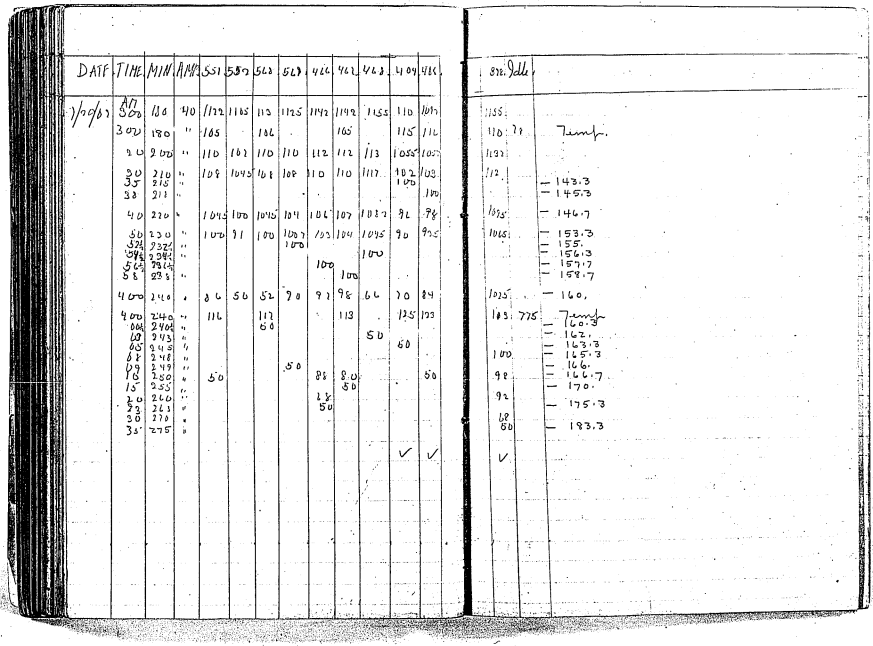
P.D.

Temp.

Temp.



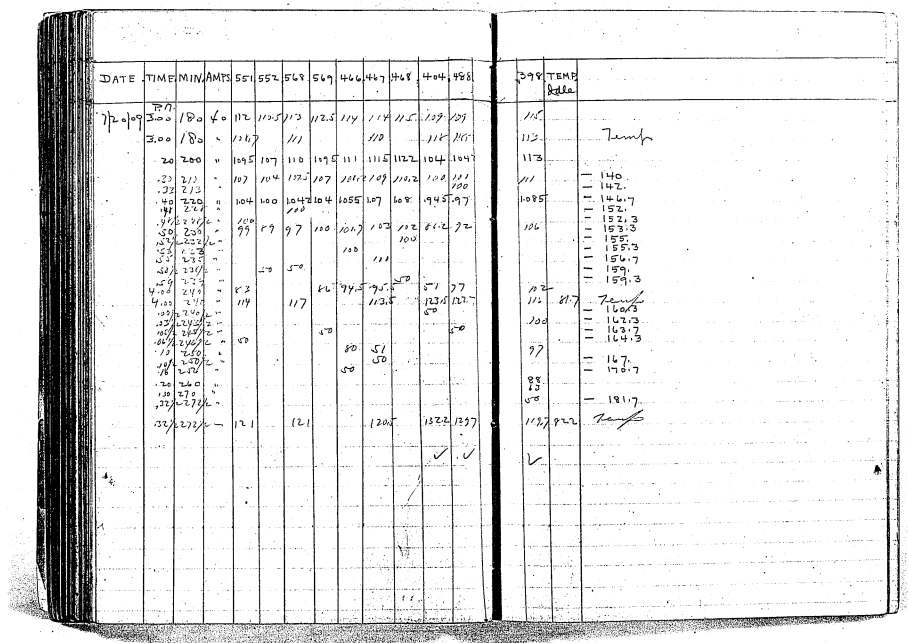




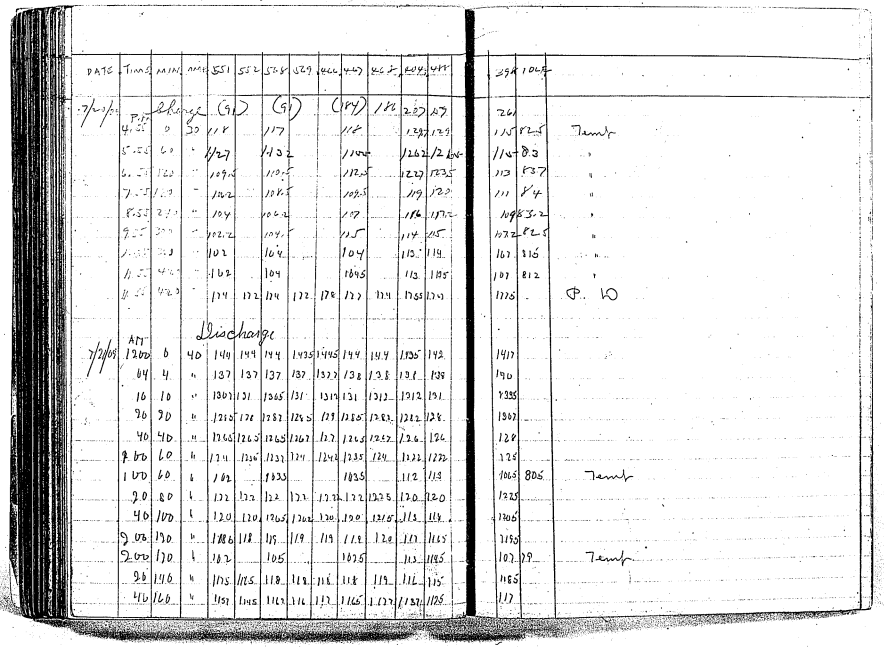
DATE	TIME	MIN.	AMP.	551	587	563	563	466	462	463	409	416
1/20/61	AM	14	40	1172	1185	113	1175	1192	1192	1155	110	1071
	300	180	"	165		162			165		115	116
	900	900	"	110	161	110	110	112	112	113	1055	1057
	30	210	"	109	1045	108	108	110	110	1117	102	103
	35	215	"								100	
	38	218	"									100
	40	220	"	1045	100	1045	104	106	107	1082	96	94
	50	230	"	100	91	100	1087	103	104	1095	90	905
	524	2322	"				100					
	594	2382	"							100		
	565	2365	"					100				
	58	238	"						100			
	600	240	"	86	50	52	90	91	96	66	70	84
	600	2400	"	116		117				113	125	123
	008	2408	"			60						
	10	243	"								50	
	60	245	"								60	
	61	248	"									
	08	249	"				50					
	18	250	"	50				88	80			50
	15	255	"						60			
	30	260	"					42				
	32	263	"					50				
	30	270	"									
	35	275	"									
											✓	✓

816 Delle		
1155		
110	79	Temp.
1133		
112		— 143.3
		— 145.3
1075		— 146.7
1045		— 153.3
		— 155.
		— 156.3
		— 157.7
		— 158.7
1025		— 160.
103	775	Temp
		— 162.
		— 163.3
100		— 165.3
		— 166.
98		— 166.7
		— 170.
92		— 175.3
68		
60		— 183.3
✓		

DATE	TIME	MIN.	MAX.	551	552	568	569	1166	467	468	402	488	398	1018	
		Discharge (70)			(90)			(183)	185	206	151		260		
7/29/09	AM 9:55	0	90	114		114			115		128	126	1135	77	Temp
	555	60	"	106		167			109		121	121	110	765	"
	655	120	"	101		162			103		115	116	105	76	"
	755	180	"	97		101			101		112	113	1035	765	"
	855	240	"	97.5		99			99.2		109	110.5	1017	767	"
	955	300	"	97		98.2			98.1		107.7	109.	101.5	768	"
	1055	360	"	97.5		99.2			99.2		107.2	108.5	102	782	"
	1155	420	"	99		101			101		108.2	109.	103.7	79	"
	1255	480	"	1.745	1.725	1.75	1.73	1.747	1.777	1.75	1.77	1.757	1.78		C. D.
		Discharge													
7/20/09	PM 12:00	0	40	1.43	1.43	1.43	1.427	1.433	1.432	1.43	1.42	1.427	1.433		
	.04	4	"	1.334	1.332	1.332	1.327	1.342	1.324	1.327	1.322	1.327	1.326		
	.10	10	"	1.307	1.304	1.31	1.31	1.312	1.31	1.31	1.31	1.31	1.312		
	.20	20	"	1.285	1.28	1.285	1.285	1.287	1.285	1.282	1.287	1.284	1.285		
	.40	40	"	1.252	1.252	1.255	1.255	1.257	1.252	1.257	1.247	1.245	1.245		
	1.00	60	"	1.23	1.225	1.232	1.23	1.23	1.225	1.227	1.217	1.212	1.224		
	1.00	60	"	1.05		1.05			1.04		1115	1127	107.5	80	Temp
	.20	80	"	1.27	1.21	1.217	1.217	1.215	1.21	1.22	1.20	1.15	1.22		
	4.0	100	"	1.20	120	121	120.5	1202	1202	1215	1165	116	121		
	4.00	120	"	116.2	116	119	119	119	119	120	117	117.7	119.7		
	2.00	120	"	116.2		108			107		115	115.7	111	807	Temp.
	.20	140	"	117	1112	117.7	117.7	114	114.8	115	115	115	1112		
	4.0	160	"	115	114	114	1167	1142	1142	112	112	112	117		



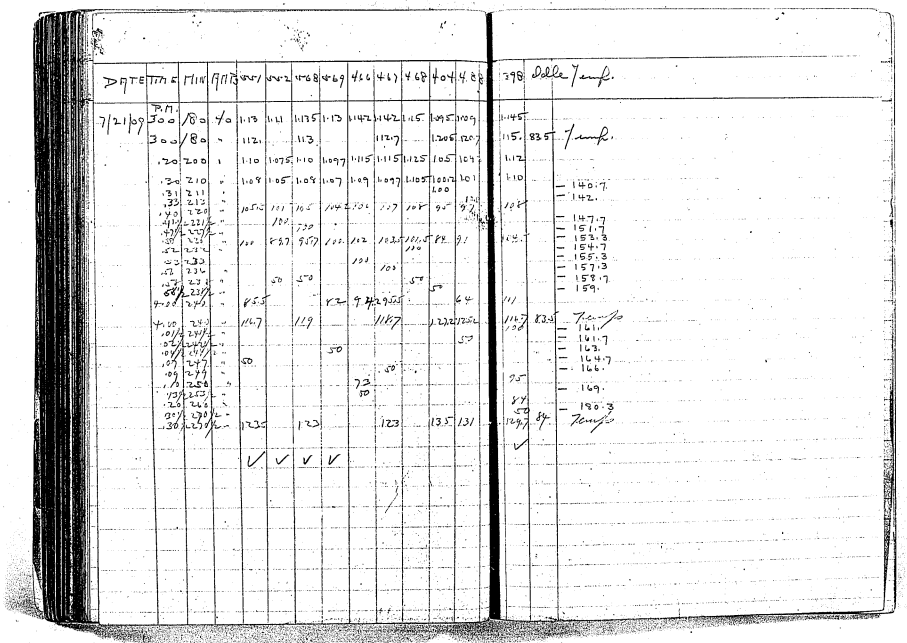
DATE	TIME	MIN	AMPS	551	552	568	569	466	467	468	404	488	398	TEMP Adda	
7/20/09	3:00 PM	180	40	112	112.5	113	112.5	114	114	115	113	114	115		
	3:00	180	"	112.7		111			110		111	115	113		Temp
	20	200	"	109.5	107	110	109.5	111	111.5	112.2	104	104.7	113		
	.22	2.13	"	107	104	112	107	101.7	109	110.2	100	111	111		— 140
	.32	2.13	"									100			— 142.
	40	220	"	104	100	104	104	105.5	107	108	94.5	97	108.5		— 146.7
	.47	2.27	"			100									— 152.
	.56	2.37	"	100											— 152.3
	.50	2.39	"	99	89	97	100	100.7	102	102	88.2	92	106		— 153.3
	.03	2.52	"							100					— 155.
	.53	2.58	"					100							— 155.3
	.57	2.59	"						111						— 154.7
	.02	3.01	"		80	80									— 159.
	.09	3.08	"												— 159.3
	4.08	2.48	"	82			76	94.5	95	80	81	77	102		
	4.11	2.51	"	114		117			113.5		133	122	111	81.7	Temp
	.13	2.53	"								80				— 160.3
	.22	2.62	"									80	100		— 162.3
	.02	3.02	"				80								— 163.7
	.04	3.04	"												— 164.3
	.11	2.40	"	80				80	81				97		
	.18	2.47	"						80						— 167.
	.26	2.55	"					80							— 170.7
	.30	2.40	"										88		
	.38	2.70	"										85		
	.37	2.72	"												— 181.7
	.37	2.73	"	121		121			120		132	137	113	82	Temp
											V	V	V		



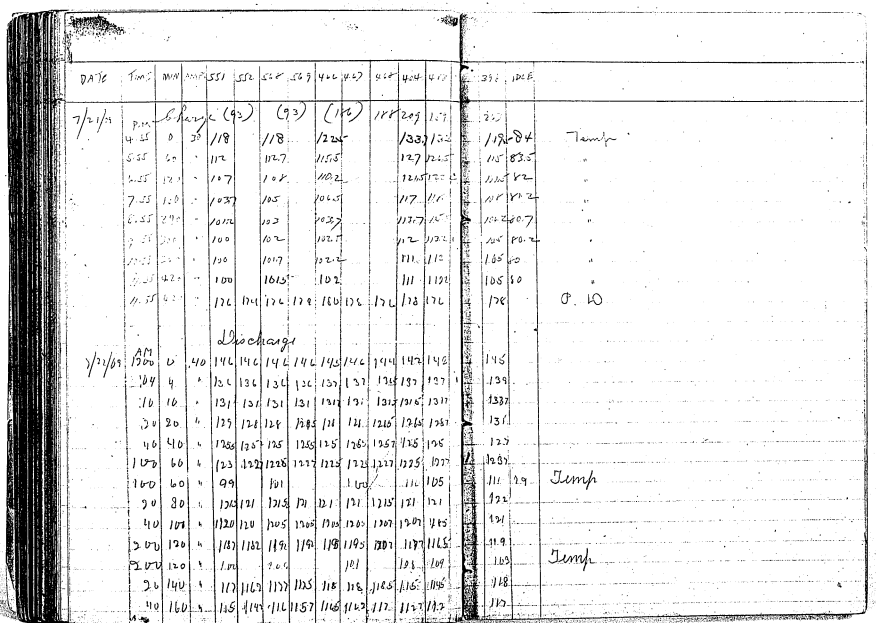
DATE	Time	MIN		551	552	553	554	555	556	557	558	559	560	561	
7/2/05		change		(91)		(91)		(184)	186	203	187		261		
	P.M. 4:55	0	30	118		117			116	1327	1329		1155	1825	Temp
	5:55	60	"	1127		1132			1144	1262	1266		1145	1833	"
	6:55	120	"	1095		1135			1125	1227	1235		113	1837	"
	7:55	180	"	1062		1065			1025	119	1220		111	1814	"
	8:55	240	"	104		1062			107	116	1172		1098	1832	"
	9:55	300	"	1022		1045			105	114	115		1072	1825	"
	10:55	360	"	102		104			1045	113	119		107	1816	"
	11:55	420	"	1062		104			1045	113	1185		107	1812	"
	12:55	480	"	1114	1122	1114	1122	1128	1122	1134	1165	1170	1126		P. 10
						Discharge									
7/2/05	AM 12:00	0	40	140	149	144	1435	1445	144	1414	1425	142	1417		
	04	4	"	137	137	137	137	1327	138	1318	1311	138	1410		
	10	10	"	1301	131	1305	131	1319	131	1312	1312	131	1335		
	20	20	"	1215	128	1282	1285	129	1285	1283	1282	128	1302		
	40	40	"	1265	1265	1265	1267	127	1265	1252	1256	126	128		
	60	60	"	1214	1256	1233	124	1248	1235	124	1232	1228	1225		
	1 00	60	"	1162		1233			1035		112	119	1065	805	Temp
	20	80	"	122	122	122	122	1228	122	1225	120	120	1225		
	40	100	"	120	120	1205	1202	120	120	1215	119	119	1205		
	2 00	120	"	1186	118	115	119	119	118	118	117	1165	1165		
	20	140	"	1162		1065			1035		113	1165	107	09	Temp
	40	160	"	1151	1145	1125	116	117	1165	1177	1130	1165	117		

DATE	TIME	MIN	FAN	461	462	463	464	465	466	467	468	469	470	398	Data Temp.
1/21/07	AM 300	136	96	1135	112	104	119	118.5	115	112	110	110	116.5		
	30	180	"	105		107			104.5		113	112	165	112	Temp
	30	200	"	1105	102.5	116.5	115	113	117.5	112.5	106.5	106	183.5		
	97	217	"								100				— 144.7
	98	230	"	107	104	105	102	101	109	110.	99.5	100	110		— 146.7
	98	235	"		100										— 152.
	50	230	"	107	118	108	103	105	106	102	95	99.5	107		
	51	230	"			100									— 157.3
	51	238	"				100								— 158.7
	51	237	"	100											— 159.3
	4 00	240	"	99.7	83.5	96	98	101.5	103	102.5	94	96	104		
	4 02	240	"	112		112			112		124	123	113	28	Temp
	03	243	"					100		100					— 162.
	08	242	"		80				100						— 165.3
	07	249	"			56									— 166.
	08	248.5	"								80				— 166.3
			"												
	10	250	"	85			82	90	74	80		47	100		— 166.7
	14	255	"									50			— 169.3
	15	253	"				50								— 170.
	18	258	"	86											— 172.
	20	260	"					76	67				92		
	21	261	"						60						— 174.
	25	265	"					80							— 176.7
	30	270	"										82		
	31	271	"										80		— 180.7

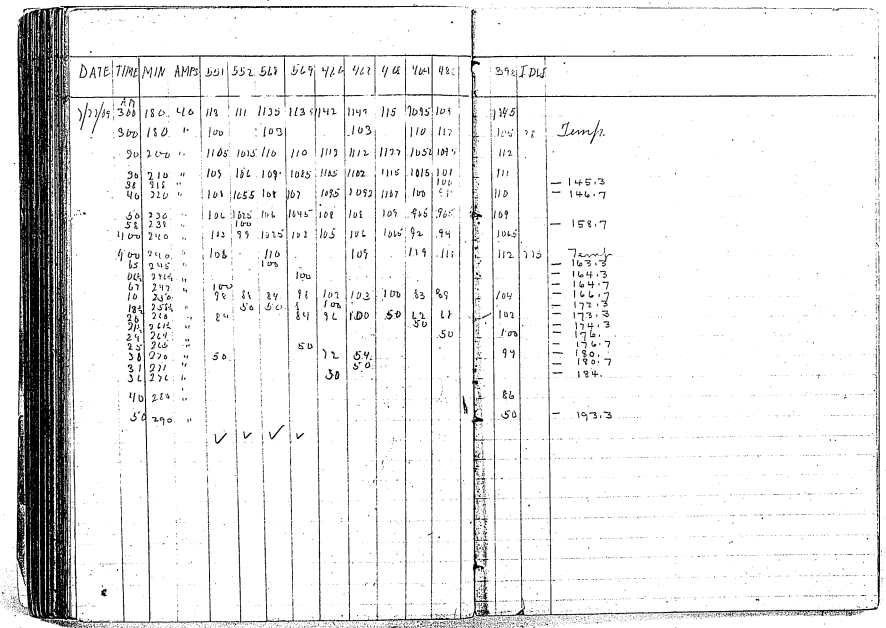
DATE	TIME	ΔP/ΔQ	AMP.	501	503	505	509	466	467	468	469	1158	356	Delta	
		Lehigh		(972)		(92)		(195)	197	208	158		2602		
9/21/07	AM 955	0	98	115		115		116		128	126		114	227	Temp.
	555	60	"	102		109		112		124	120		112	226	"
	555	120	"	1045		107		105		117	120		103	22	"
	955	180	"	101		103		104		114	116		106	29	"
	855	240	"	99.7		101.5		102.2		111.5	113		1045	79.5	"
	955	300	"	992		101.2		101.2		1102	112		1042	80	"
	1055	360	"	100		102		102		110	1115		1047	81	"
	1155	420	"	101.2		103		103.2		111	1117		1067	817	"
	1155	420	"	1.742	1.722	1.745	1.725	1.725	1.775	1.745	1.765	1.75	1.78	90	D.
7/21/09	7AM			One Range											
	200	0	4/0	1.432	143	143	1432	143	143	1412	140		1.44		
	04	4	"	1332	133	1322	1327	1342	1342	1342	1337		1367		
	10	10	"	131	131	131	1312	1317	1317	131.2	1311		1337		
	20	20	"	129	1287	129	129	1292	129	129	1287	1287	131		
	40	40	"	1255	1252	1255	1255	1255	1257	1245	1245		1267		
	100	60	"	123	1227	1282	1222	123	1227	1275	1214	1214	1237		
	100	60	"	106		1074		1074		1067	1055		1102	827	Temp
	20	80	"	1215	121	1217	1217	1215	1215	1222	1208	1197	122		
	40	100	"	120	120	1215	1202	1202	120	1202	1192	1192	1202		
	200	120	"	1.17	1162	1.19	1.19	1.19	1.19	1.172	1165		1.19		
	200	120	"	109.5	111			108		112	108.5		1127	825	Temp.
	20	140	"	117	1162	1172	1175	118	118	1176	115	1145	118		
	40	160	"	1.15	1.142	1.16	1.157	1.165	1.162	1.17	1.127	1.172	1.17		



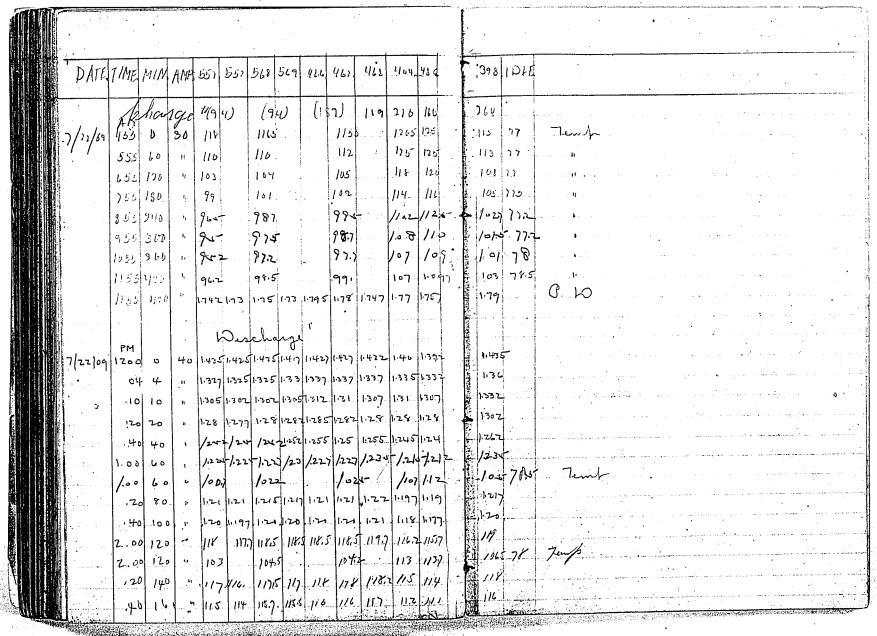
DATE	TIME	MIN	AMB	4W1	4W2	4W8	4W9	4W6	4W7	4W8	4W4	4W3	398	Adele Temp.
7/21/89	3PM 3:00	180	70	1.13	1.11	1.135	1.13	1.142	1.142	1.15	1.095	1.109	1.145	
	3:00	180	"	112.		113			113.7		1.206	120.7	115.	83.5 Temp.
	.20	200	"	1.10	1.075	1.10	1.097	1.115	1.115	1.125	105	104	1.12	
	.30	210	"	1.08	1.05	1.05	1.07	1.09	1.097	1.105	1.002 1.00	101	1.10	— 140.7
	.31	211	"											— 142.
	.32	212	"											
	.40	220	"	102.5	101	105	104	104	104	108	95	97	104	— 147.7
	.41	221	"		102									— 151.7
	.42	222	"			730								— 153.3
	.50	230	"	100	95.7	95.7	100.	102	102.	101.5	84	91	102.	— 154.7
	.51	231	"							110				— 155.3
	.52	232	"					101						— 157.3
	00	300	"						103					— 158.7
	.01	301	"											— 159.
	.02	302	"		50	50				50	50			
	4:00	240	"	85.5			82	74	74	75.5		64	111	
	4:00	240	"	116.7		119			118.7		122	120.5	114.7	83.5 Temp
	.01	241	"										138	— 161.
	.02	242	"									53		— 161.7
	.03	243	"				50							— 163.
	.04	244	"											— 164.7
	.05	245	"	60.					50					— 166.
	.09	249	"					73					95	— 169.
	.10	250	"					50					84	
	.13	253	"										59	— 180.3
	.20	260	"										149	64 Temp
	.30	270	"	123		123			123		135	131		
				✓	✓	✓	✓						✓	



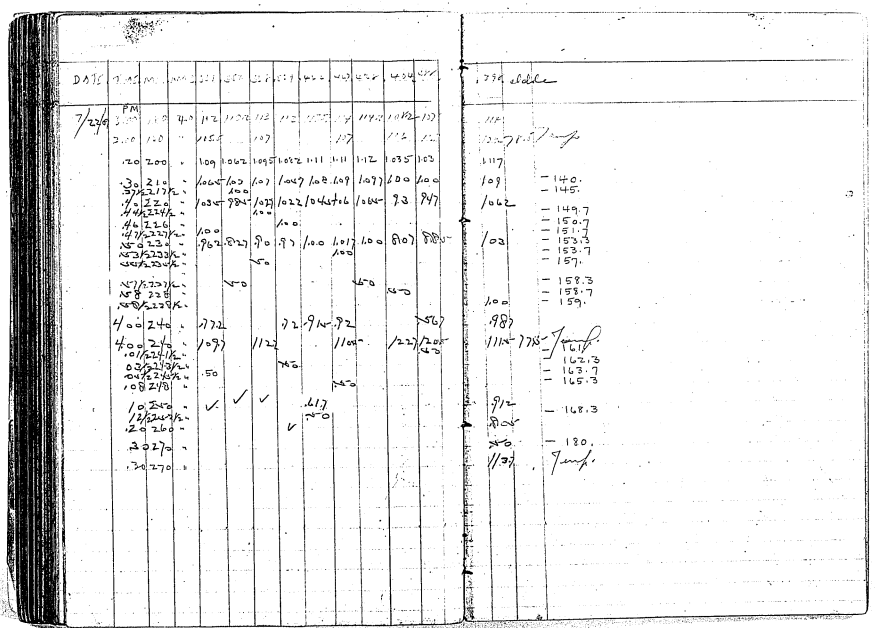
DATE | Time | MW | [illegible] | [illegible] | [illegible]



DATE	TIME	MIN	AMPS	551	552	561	569	424	427	44	4061	483	398	IDLS	
1/22/19	300	180.	46	113	111	1135	113	1142	1149	115	1095	109	145		
	300	180.	"	100		103			103		110	117	105	98	Temp.
	90	200	"	1105	1015	110	110	1113	1112	1127	1052	1095	112		
	36	210	"	103	182	109	1025	1145	1102	1115	1015	101	111		
	52	215	"									100			
	46	220	"	101	1055	104	107	1085	1092	1187	100	99	110		— 145.3
	50	230	"	102	1055	106	1045	108	101	109	965	965	109		— 146.7
	58	235	"		100										— 158.7
	1 00	240	"	103	99	1025	102	105	101	1015	92	94	1025		
	4 00	240	"	106		110			109		119	111	112	103	Temp
	65	245	"			100									— 163.3
	065	2415	"				100								— 164.3
	67	247	"	100											— 164.7
	10	250	"	98	88	89	98	107	103	106	83	89	104		— 166.7
	184	255	"		50	50		100							— 172.3
	26	258	"	84			84	92	100	50	43	47	102		— 173.3
	30	2615	"								50				— 174.3
	29	264	"									50	100		— 176.
	25	265	"				50								— 176.7
	38	270	"	50				92	54				94		— 180.
	31	277	"						50						— 180.7
	3L	270	"					30							— 184.
	40	280	"										86		
	50	290	"										50		— 193.3
				✓	✓	✓	✓								



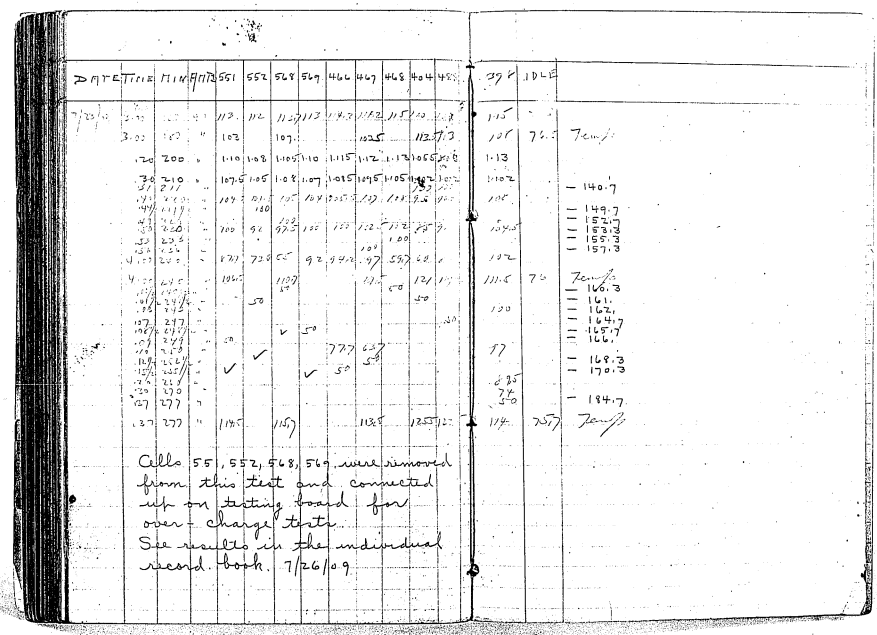
DATE	TIME	MIN	AMB	551	552	568	569	426	476	421	404	438	398	418	
			Recharge	4(94)		(94)		(157)	169	216	110		364		
7/21/09	1555	0	30	114		1165			1150		1265	125	1115	77	Temp
	555	60	"	110		110			112		125	125	113	77	"
	655	120	"	103		104			105		118	120	103	77	"
	755	180	"	99		101			102		114	117	105	77.5	"
	855	240	"	96.4		98.7			98.4		1122	1124	1029	77.2	"
	955	300	"	96		97.5			98.7		108	110	1045	77.2	"
	1055	360	"	95.2		97.2			97.2		107	109	101	78	"
	1155	420	"	96.2		98.5			99.		107	1091	103	78.5	"
	1255	480	"	1742	173	175	173	1795	178	1747	177	175	1179		Q.O
			Discharge												
7/22/09	PM 1200	0	40	1425	1425	1475	1447	1442	1487	1422	1440	1397	1195		
	04	4	"	1337	1335	1335	1333	1337	1337	1337	1335	1337	1136		
	10	10	"	1305	1302	1302	1305	1312	1321	1307	1311	1307	1332		
	20	20	"	1278	1277	1278	1282	1285	1282	1278	1278	1278	1302		
	40	40	"	1224	1224	1224	1252	1255	1255	1255	1248	1254	1262		
	1.00	60	"	1224	1224	1224	1223	1227	1227	1224	1224	1221	1234		
	1.00	60	"	1004		1022			1024	1021	1112		1042	78.5	Temp
	20	80	"	1121	1121	1125	1127	1121	1121	1122	1119	1119	1127		
	40	100	"	1120	1119	1124	1120	1124	1124	1121	1118	1117	1120		
	2.00	120	"	118	1177	1185	1183	1185	1185	1179	1162	1157	119		
	2.00	120	"	103		1045			1045		113	1137	1065	78	Temp
	20	140	"	117	1116	1175	117	1174	1178	1182	1175	1174	1118		
	40	160	"	1115	114	1167	1166	1176	1176	1177	1173	1172	116		



Date	Time	Min	Hydrant												398	Notes
7/27/05	Discharge														264	
	12:00	0	30	112.2		111.2				113.5		126.5	114.7		114.77	Temp
	12:04	60	"	106.5		107				107		121	121		110.2	77 "
	12:10	120	"	104		105				106		117.5	118.2		108	77.7 "
	12:16	180	"	101.5		103				103.7		117.5	115		106.5	76 "
	12:22	240	"	99.5		101.5				101.5		111.2	113		104.5	76.2 "
	12:28	300	"	97		99				99		109	111		102	76 "
	12:34	360	"	97		99.5				99.5		108	110		103	77.7 "
	12:40	420	"	97.5		100				100		108	109.5		103.5	77.5 "
	12:46	480	"	116	174	116	174	180	129	174	178	122	180		180	P. 60
				Discharge												
7/29/05	AM 12:00	0	40	143	143	143	142	142	142	142	142	140	139		144	
	04	4	"	133	133	133	133	133	134	130	134	134	132		134	5
	10	10	"	133	130	131	131	131	131	131	131	131	131		133	3
	20	20	"	126	126	125	126	126	126	126	126	126	126		130	
	40	40	"	125	125	125	125	125	125	125	125	125	124		126	5
	1:00	60	"	125	125	125	125	123	123	125	123	121	125		123	7
	1:00	60	"	100		103				102		103	111		105	77 Temp
	20	80	"	126	125	127	127	125	123	123	123	120	119		122	
	40	100	"	120	120	120	120	120	120	120	121	121	122		120	2
	2:00	120	"	118	118	119	119	119	119	119	120	116	116		119	5
	2:30	150	"	125		115				104		113	114		109	787 Temp.
	20	140	"	117	116	117	116	116	116	118	118	115	114		116	
	40	160	"	115	114	115	115	116	116	116	115	112	115		114	

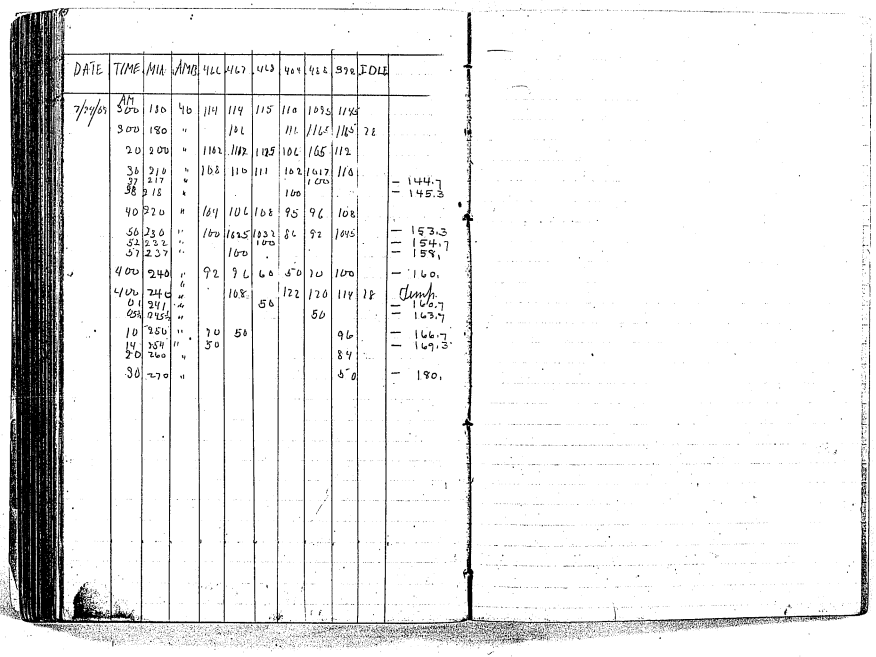
DATE	TIME	MIN	ANE	851	357	552	563	762	472	465	903	984	392	TBLE	
7/23/09	AM 300	180	46	1122	1115	1155	1123	114	119	115	109	138	745		
	300	120	"	105	107	102			106		115	116	109	77	Temp
	126	900	"	109	107	110	119	110	1105	1117	1035	102	1117		
	30	210	"	101	104	1075	1065	108	109	110	100	100	110		— 140.
	40	220	"	104	100	104	104	105	112	1075	94	95	107		— 146.7
	61	238	"			100									— 152.
	49	229	"				103								— 152.7
	50	230	"	100	90	96	99	100	1025	101	84	90	104		— 153.3
	574	2314	"							100					— 154.3
	596	2392	"						100						— 156.3
	59	237	"			86									— 159.3
	400	2410	"	84	80		72	94	86	80	86	61	100		— 160.
	1100	2415	"	1138		1165			1115		122	130	109	777	Temp.
	04	2419	"									80			— 162.7
	064	2425	"				50								— 164.3
	028	2431	"	80											— 165.
	10	2436	"					92	80				94		— 166.7
	136	2522	"					86					78		— 169.
	20	2426	"												
	29	269	"	✓	✓	✓	✓						58		— 179.3

DATE	TIME	MIN	AMPS	561	562	563	564	565	566	567	568	569	570	571	TOT	DIFF	
				Preliminary (96)			(92)			(189)	191	512	512		2706		
1/23/05	1155	0	36	111			110			110		1245	1270		1126	78	Temp
	555	16	"	105			104			106		118	116		1654	75	"
	555	120	"	100			101			102		113	112		1680	74	"
	755	120	"	97			975			98		101	102		1681	74	"
	555	240	"	947			962			963		1062	1065		9871	74	"
	955	360	"	934			964			961		1064	1064		9977	74	"
	1055	360	"	937			947			957		1052	1047		9877	76	"
	1155	476	"	947			98			972		106	1055		10005	76	"
	1156	476	"	1.757	1.74	1.76	1.74	1.807	1.79	1.76	1.79	1.752			1780		P. 10.
							Discharge										
7/23/05	PM 1200	0	40	1.44	1.43	1.43	1.43	1.43	1.43	1.427	1.41	1.39			1437		
	04	4	"	1.33	1.33	1.33	1.332	1.34	1.34	1.34	1.337	1.332			1365		
	10	10	"	1.31	1.31	1.31	1.31	1.315	1.315	1.312	1.312	1.31			1337		
	20	20	"	1.284	1.284	1.287	1.29	1.29	1.287	1.28	1.284	1.284			1311		
	40	40	"	1.25	1.255	1.252	1.252	1.252	1.25	1.252	1.245	1.242			1261		
	1.00	60	"	1.23	1.23	1.23	1.22	1.22	1.22	1.23	1.227	1.217			1247		
	1.00	60	"	100.		101.7			101.		108.	108.5			1044		Temp.
	20	80	"	1.212	1.21	1.214	1.215	1.21	1.21	1.222	1.197	1.192			1222		
	40	100	"	1.20	1.20	1.20.7	1.212	1.21	1.21	1.214	1.195	1.19			1210		
	200	120	"	1.185	1.182	1.19.5	1.19	1.19	1.19	1.20	1.17	1.172			1180		
	200	120	"	100.7		103			102.5		111.5	1107			1015	2.5	Temp.
	20	140	"	1.17	1.17	1.18	1.18	1.18	1.18	1.19	1.157	1.145			1178		
	40	160	"	1.15	1.142	1.16	1.16	1.162	1.16	1.17	1.13	1.132			1162		



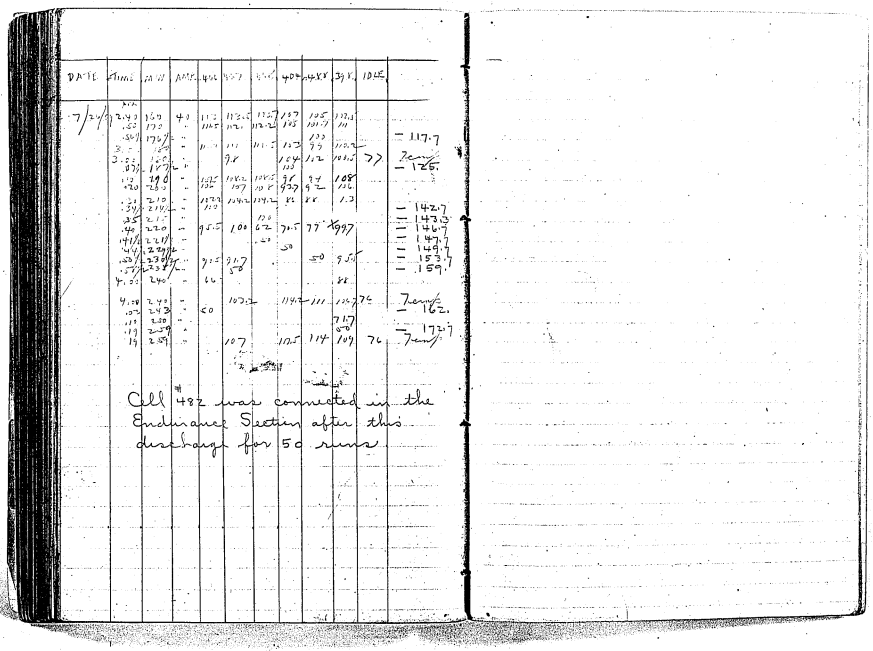
Calls 551, 552, 568, 569 were removed from this test and connected up on testing board for over-charge tests. See results in the individual record book. 7/26/09

| | | |



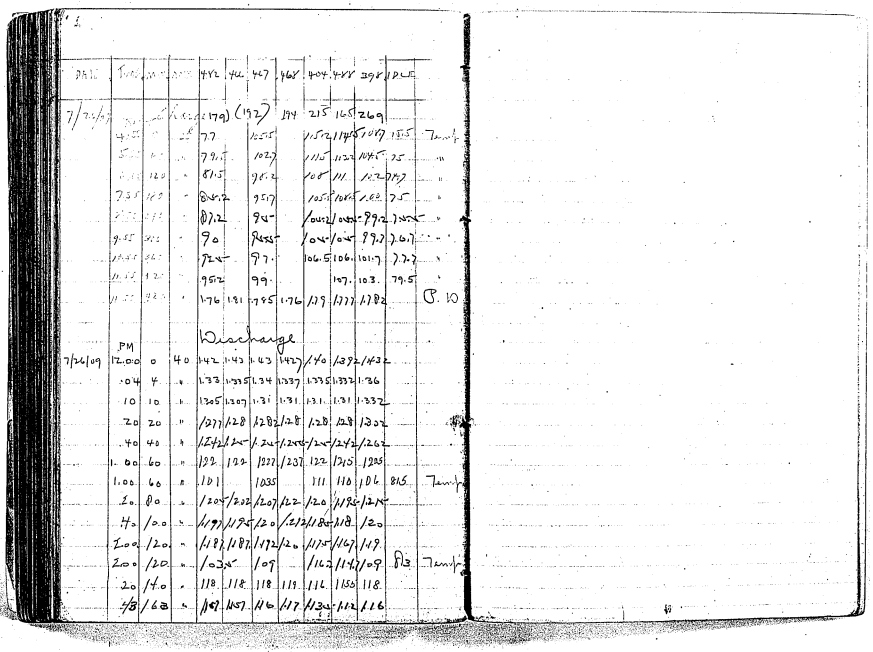
DATE	TIME	MIL	AMB	426	467	463	409	428	378	IDLE	
7/29/65	AM 300	130	46	114	114	115	110	1036	1145		
	300	180	"		101		111	1165	1163	28	
	20	200	"	1102	1102	1125	106	165	112		
	36	210	"	102	110	111	102	1617	116		
	37	217	"				100	1600			
	38	218	"				100				— 144.7
											— 145.3
	40	220	"	104	106	108	95	96	108		
	56	236	"	100	1625	1032	86	92	1045		— 153.3
	57	237	"		100	100					— 154.7
											— 159.
	400	240	"	92	96	60	50	70	100		— 160.
	400	244	"		108		122	120	114	28	Lunch
	01	241	"			50					— 160.7
	03	243	"					50			— 163.7
	10	250	"	70	50				96		— 166.7
	14	254	"	50							— 169.3
	20	260	"						84		
	30	270	"						60		— 180.

DATE	TIME	MIN	AMPS	406	412	408	409	428	398	IDLE	
7/25/60			Charge (191)			193	214	164	148		
	AM 455	0	36		114		126	121	116	77	Temp
	555	60	"		108		122	126	112	77	"
	655	120	"		103		116	116	107	77	"
	755	180	"		99		112	116	103	75	"
	855	240	"		96.5		108.	107.2	100	75	"
	955	300	"		96		105.	105.5	97.2	74.2	"
	1055	360	"		96.		104.5	105	97.	74.	"
	1155	420	"		97.5		105.	104.5	97.7	76.5	CP 10
	1155	420	"								
				Stop. 36 hours charged.							
				Discharge							
7/26	AM 12.00	0	40		79.2		89	79.7	80.2	79.5	Temp
	12.00	0	"	133	131	130	128	127.5	130.5		
	.04	4	"	127.7	125	124	123	122.7	126.5		
	.10	10	"	122.5	123	122	121	120.2	124.5		
	.20	20	"	121	120.5	121	119.5	119	122.2		
	.40	40	"	119.5	120	120	117	116.5	120		
	1.00	60	"	117.2	119	119.7	116	115	119.		
	1.00	60	"		87		87.5	88	87.7	78.2	Temp
	.20	80	"	117.5	118	119	115	113.5	117.7		
	.40	100	"	117	117	118	113.7	112	117		
	2.00	120	"	116	116.2	117	112	110.5	116		
	2.00	120	"	6	92.5		97	95.5	92.2	77.5	
	.20	140	"	116.2	115	115.5	113.7	108	114		

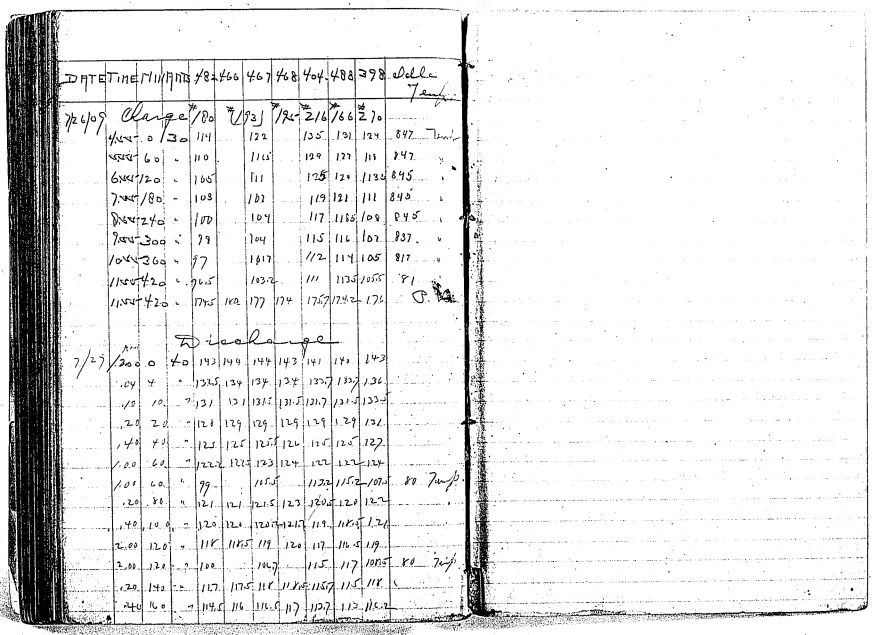
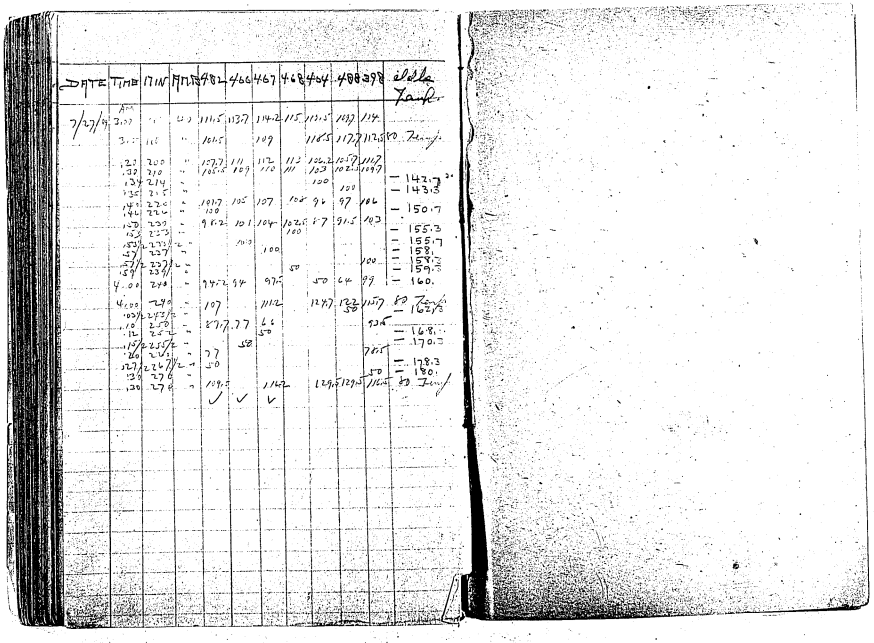


DATE	Time											
7/24/11	2:43	1:59	40	111	112.5	113.7	113.7	113.7	105	113.3		
	1:53	1:20	"	110.5	112.1	113.2	113	113.7	104			
	3:54	1:26	"						133			— 117.7
	3:-	1:20	"	111	111.5	113			73	113.2		
	3:53	1:20	"		94		138	112	104.5		7	Temp — 126.
	1:30	1:20	"				133					
	1:12	2:10	"	110.5	110.5	110.5	94	94	108			
	1:20	2:10	"	110	107	110.5	93.7	92	106			
	1:21	2:10	"	107.9	109.2	109.2	88	88	1.3			— 142.7
	1:21	2:10	"	109								
	1:25	2:15	"				120					— 147.3
	1:40	2:20	"	95.5	100	62	72.5	77	99.7			— 146.7
	1:41	2:21	"			2:27						— 149.7
	1:41	2:20	"				138					— 149.7
	1:23	2:20	"	95.5	94.7			50	95.5			— 153.7
	1:27	2:23	"		58							— 159.
	4:22	2:40	"	46					88			
	4:18	2:43	"		107.2		114.2	111	116.7	75	7	Temp — 162.
	1:07	2:43	"	60								
	1:13	2:20	"						74.7			
	1:19	2:39	"						60			— 172.7
	1:19	2:39	"		107		110.5	114	109	76	7	Temp

Cell 482 was connected in the Endurance Section after this discharge for 50 runs



DATE	Time	Min	Amb	482	466	467	468	404	488	398	Add'l Temp
7/26/09	3 PM	180	40	/114	114	114	114	/110	114		
	300	180	"	/062	/122	/20	112	114	84.2		Temp
	2	200	"	/102	102	116	/122	/06	/08	114	
	03	220	"	/074	107	/183	/102	/008 /100	107	/07	— 143.
	.3½	2214	"								— 144.
	06	216	"						/100		
	40	220	"	/062	/044	107	/088	97	98	/072	
	.6	230	"	/034	/008 /100	/027	/037	.872	92	1.04	— 154.
	.47	231	"								— 156.7
	44	2345	"					7.00			— 158.
	47	237	"						/100		— 160.
	4 00	240	"	/00	732	96	"	88	782	/008	
	4 00	240	"	/082		/147		127	122	1122	847 Temp
	02	242	"							/002	— 161.3
	06	246	"						880		— 164.
	10	250	"	977	86	92				97	
	12	252	"			86					— 168.
	15	255	"		50						— 170.
	96	260	"	92						865	
	30	270	"	856						61 50	— 182.3
	92½	272½	"								
	4m	280	"	88							— 187.
	40½	282½	"	80							
				✓							



DATE	TIME	MIN	AMB	#82	#66	#67	#68	#04	#88	#98	Delta T
7/26/08		change		#80		#83	#82	#216	#66	#270	
	4AM	0	130	114		122		135	131	124	847 Temp
	5AM	60	"	110		115		129	127	115	847 "
	6AM	120	"	105		111		125	124	1130	845 "
	7AM	180	"	103		101		119	121	111	845 "
	8AM	240	"	100		104		117	1185	108	845 "
	9AM	300	"	99		104		115	116	107	837 "
	10AM	360	"	97		1017		112	114	105	817 "
	11AM	420	"	9615		103.2		111	1135	1055	81 "
	12AM	420	"	1745	102	177	174	176.7	174.2	176	D.
				Dieal change							
7/27	AM 1200	0	40	142	144	144	143	141	140	143	
		04	4	"	1335	134	134	133	1337	1337	136
		10	10	"	131	131	1312	131.5	1317	131.5	1335
		20	20	"	128	129	129	129	129	129	132
		40	40	"	125	125	125.5	126	126	125	127
		80	60	"	122.2	122.5	123	124	122	122	124
		100	60	"	99		105.5		1132	115.2	107.5 80 Temp
		120	80	"	121	121	121.5	123	120.5	120	122
		140	100	"	120	120	120.7	122.7	119	119.5	121
		200	120	"	114	114.5	115	120	117	116.5	119
		300	120	"	100		106.7		115	117	1075 80 Temp
		420	140	"	117	117.5	116	117.5	116.5	115.5	118
		540	160	"	114.5	116	116.5	117	1137	112	115.2